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PRACTICAL REMARKS

ON THE PRESENT STATE OF

LIFE INSURANCE IN THE UNITED STATES.

SHOWING THE EVILS WHICH EXIST, AND RULES FOR IMPROVEMENT.

To which are added the valuable Tables of associated Actuaries,
now printed for the first time in the United States.

BY

HARVEY G. TUCKETT, R. P. S. E.

AUTHOR OF THE "EAST INDIAN REVENUE SYSTEM," WRITTEN BY "DESIRE OF THE PRESIDENT
AND VICE PRESIDENT AND MEMBERS OF THE MANCHESTER CHAMBER OF
COMMERCE AND MANUFACTURES," ETC., ETC., ETC.

"You cannot reason from fire and marine, to Life risks at all. The Life risk will certainly terminate in a loss to the Company."—LEWIS POCOCK.

"The practice of LIFE INSURANCE in any country indicates a state of society, where high moral feeling and commercial confidence exist."—JENKIN JONES.

FOURTEENTH EDITION.
REVISED AND CORRECTED TO JULY 1, 1851.

PHILADELPHIA:
PUBLISHED BY THE AUTHOR,

No. 80 Walnut Street.

1851.

137872.

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PREFACE.

THIS TREATISE is intended not only for the use of INSURERS throughout the United States, but as an easy reference for all persons interested in the *practical* application of the science of Life Insurance.

The evils of a purely speculative competition, which are now developing themselves throughout the UNION, in the form of—"eighty per cent. dividends"—"low premiums"—and "promissory notes,"—are clearly pointed out, and their injurious effects to the INSURER demonstrated by a reference to the "Tables of Mortality" and the "Rates of Compound Interest," the only legitimate foundation of LIFE INSURANCE.

Had there been any work published in the UNITED STATES, to which the INSURER could refer with CONFIDENCE, I should have refrained from appearing before the public. But, as I find the most baneful effects arising from the fallacious statements put forth daily by interested speculators to cajole INSURERS, I have considered the work of a PRACTICAL ACTUARY the most useful offering I could make, and the best protection for this "SAVINGS' BANK FOR THE WIDOW AND ORPHAN."

H. G. TUCKETT, ACTUARY.

Philadelphia, March 1st, 1851.



PRESENT STATE

OF

LIFE INSURANCE IN THE UNITED STATES.

THERE are three descriptions of Insurance, viz. FIRE, MARINE, and LIFE. The two former differ from the latter in every respect, and not the slightest analogy exists between them.

In the case of FIRE and MARINE, the property insured may, or may not meet with loss, the chances are a thousand to one it will not, whereas in LIFE, the sum assured must be paid at some future period, DEATH being a certainty.

If a house is insured against fire, the premium is paid for "a year;" the risk of the office terminates at the end of the "year;" and both parties are open at the end of "that year" to continue the contract or separate, as they think proper; the house being as insurable at the fiftieth year as it was at the first.

If the house should be burnt, a portion of the property may be saved, and only a partial loss sustained. In Life Insurance there is no partial loss.

In Marine Insurance the premium is paid for "a voyage," the risk terminates with the "voyage," and both parties at the termination of each "voyage" can continue or declare off as they think most conducive to their interests. If the vessel is wrecked, a portion of the cargo may be saved, and though damaged, relieve the Insurers from a great part of their loss. In Life Insurance nothing is saved—DEATH TAKES ALL.

Fire and Marine Insurance Companies therefore can close their accounts at the end of every year, and arrive at a correct conclusion of their profit and loss. They may take their premiums in notes at short dates without injury to themselves. They may declare a dividend at the end of each year, if they have made a profit, without suffering the imputation of imprudence; and moreover, neither FIRE INSURANCE nor MARINE INSURANCE have anything to do with the compound interest of money, upon which the calculations of LIFE INSURANCE are based.

In LIFE INSURANCE, if the person taking out a policy is twenty-five years of age, it is presumed the contract will last thirty-seven years; at thirty years of age, the contract will last thirty-four years; at thirty-five

years of age, thirty-one years; at forty years of age, twenty-seven years; at forty-five years of age, twenty-four years; at fifty years of age, twenty years; at fifty-five years, seventeen years; and at sixty years of age, fifteen years. Therefore, at no intermediate period can the insured withdraw from his contract, *without great loss to himself*; for, he would not only lose the premiums he has already paid, but he would have to pay an *increased* rate of premium to another office in accordance with his increased age; and if his health has been impaired, he would be rejected altogether. In Life Insurance an altered state of health is fatal to effecting a new policy.

It therefore behooves every person, before insuring, to consider well the terms of the different offices—whether they be PROPRIETARY or MUTUAL: the rates of their Premiums—whether sufficient or not: and to regard with the greatest suspicion and distrust the tempting lures held out either under the name of bonus or dividend. The insurer's interest in the stability and permanent prosperity of a Company, in the security of the *principal* sum they have contracted to pay at his death, is incomparably greater than in the amount of any present distribution under the assumed name of profits of any offer of the shadow for the substance.

Life Insurance is not a speculation, for the principle of Life Insurance is based upon sound mathematical calculation, and will not admit of any variation. It is a plain matter of fact—"two and two make four." Different offices, to make their prospectus more tempting, may vary the position of the four units as they like; they may call "one and three" a better four than "two and two;" or, prove that "one, and two, and one" is a superior four to either; and as long as they only make FOUR, whether the Company be PROPRIETARY or MUTUAL, matters not; but, the moment they pretend to the insurers they have discovered a new method of making "two and two into FIVE," the Company may be set down as rotten, totally unworthy of public confidence, and sure to result in ultimate loss and dishonour to every one connected with the scheme—in the robbery of the widow and orphan.

There are three descriptions of LIFE INSURANCE Companies:

PROPRIETARY, which has a paid up capital and contracts to pay a specified sum at the decease of the insured, without either increase or reduction, in the amount of policy. These are mere trading companies, selling assurances to policy holders, as a merchant sells goods to his customers, and depending upon their good opinion.

The excellence of this class of office should be the superiority of the security—and the exemption of the assured from all responsibility from the engagements of the Company. They charge a proportionately lower rate of premium.

THE MUTUAL.—The policy holders are each ASSURERS as well as ASSURED, and consequently should be liable to all LOSSES* as well as entitled to all the PROFITS of the Association. The best authorities on life assurance say "for a Mutual Life Insurance Company to succeed the early members must contribute in a *much higher degree* than the subse-

*By the Mutual charters granted by the Legislature, no one insured is to be liable for Loss beyond the premium he has paid; so that, in fact, there is no assurer. Queer ideas they have of Life Insurance.

quent members; indeed, there can be no doubt that the very large surplus capital accumulated in the London Equitable Society, has been derived from the *unduly excessive* rates of premium, contributed by the early members, the benefits of which are altogether enjoyed by the families of others."

"It would thus seem evident that however much a Mutual Assurance Society may be a desirable office for a policy holder in its *maturity*, it cannot be so considered in its *infancy*, as it must, in order to be *safe*, require of its members a larger amount of contribution than would, under ordinary circumstances, be sufficient to provide for the claims assured."

Many Mutual Insurance Companies set forth the immense advantages which have accrued to the policy holders in the LONDON Equitable, as showing what may be done by MUTUAL COMPANIES in the United States; but in doing so, they are guilty of the grossest ignorance or the grossest deceit, inasmuch as they suppress the truth and cause of such success. The LONDON EQUITABLE was started in the year 1762. To a policy holder 30 years of age the premium charged was \$4 per \$100, whereas the highest premium charged in the States by MUTUAL OFFICES is \$2 ³⁶/₁₀₀ per \$100. In 1782, AFTER TWENTY YEARS' EXPERIENCE, the Equitable declared their first dividend of one and a half per cent., or 30 per cent for the twenty years.

Contrast this with those "MUTUALS" who, in the first year, declare scrip dividends of 80 per cent.; thus entailing an enormous load of debt for future years upon the Company, whilst their premium is SEVENTY per cent. lower than the EQUITABLE (the office they quote from) was at its commencement.

In 1815, the London Equitable, at a meeting of their POLICY HOLDERS, passed a resolution that only the first FIVE THOUSAND policies on the list, should share in the profits; there being then NINE THOUSAND policies in existence. In consequence of this rule, it now requires a policy to be held at least TWENTY-TWO YEARS before the party can participate in the profits. In the United States, there are Mutual Companies pretending to be based upon the principles of the London Equitable, in which, if the insurer will pay a premium on the 31st December, they will give him a dividend *three* times as large as that of the Equitable, on the first day of January. In one night the great "Mutual" power works a whole year's profit!!!!

Out of eighty Life Insurance Companies in London, six only are Mutual Companies—the remainder offering the advantages of the "mixed;" that is, a low rate of premium if the party insure without Profits; a higher rate if he insures with a participation to the extent of two-thirds of the Profit.

It is now my intention to lay down as simply as possible the principles upon which the calculation of Life Insurance is based. The first principle is an estimate of the average duration of Life, formed from observations among large masses of mankind, during an extended period of time. These are called the Tables of Mortality. The table most usually adopted is the Carlisle, this being the most favourable to the insurer; and within a fraction of "THE LAW OF MORTALITY AMONGST ASSURED LIVES," deduced from 62,537 assurances, under the superintendence of a committee of eminent actuaries.

THE EXPECTATION OF LIFE,

According to the Carlisle Tables of Mortality.

Age.	Expectation in years and 100ths.	Age.	Expectation in years and 100ths.	Age.	Expectation in years and 100ths.	Age.	Expectation in years and 100ths.	Age.	Expectation in years and 100ths.
At Birth.	38.72	21	40.75	42	26.34	63	12.81	84	4.39
1	44.68	22	40.04	43	25.71	64	12.30	85	4.12
2	47.55	23	39.31	44	25.09	65	11.79	86	3.90
3	49.82	24	38.59	45	24.46	66	11.27	87	3.71
4	50.76	25	37.86	46	23.82	67	10.75	88	3.59
5	51.25	26	37.14	47	23.17	68	10.23	89	3.47
6	51.17	27	36.41	48	22.51	69	9.70	90	3.28
7	50.80	28	35.69	49	21.81	70	9.18	91	3.26
8	50.24	29	35.00	50	21.11	71	8.65	92	3.37
9	49.57	30	34.34	51	20.39	72	8.16	93	3.48
10	48.82	31	33.68	52	19.68	73	7.72	94	3.53
11	48.04	32	33.03	53	18.97	74	7.33	95	3.53
12	47.27	33	32.36	54	18.28	75	7.01	96	3.46
13	46.51	34	31.68	55	17.58	76	6.69	97	3.28
14	45.75	35	31.00	56	16.89	77	6.40	98	3.07
15	45.00	36	30.32	57	16.21	78	6.12	99	2.77
16	44.27	37	29.64	58	15.55	79	5.80	100	2.28
17	43.57	38	28.96	59	14.92	80	5.51	101	1.79
18	42.87	39	28.28	60	14.34	81	5.21	102	1.30
19	42.17	40	27.61	61	13.82	82	4.93	103	0.83
20	41.46	41	26.97	62	13.31	83	4.65	104	0.50

Example at the age of 30—the expectation is $34\frac{34}{100}$ or 34 years and four months, that a person then in sound health has a probability of living. The Carlisle Table is too high an estimate of life for the United States—where the average duration is nearer the Irish expectation.*

The next principle is the accumulation of money at compound interest, the rate of which is generally assumed throughout the United States at 6 per cent. ; but it may be reasonably doubted by business men, if 5 per cent. can be realized for a long term of years (admitting there should not

* An office may calculate upon receiving upon the “Tables of Irish Life”—at 20 years of age only thirty-five premiums instead of forty-one; at 30 years of age only thirty premiums instead of thirty-five; at 40 years of age only twenty-four premiums instead of twenty-eight; and at 50 years of age only eighteen premiums instead of twenty-one.

The average American rate of pulse is FIFTEEN BEATS PER MINUTE HIGHER than the English. This fact has been ascertained from actual comparison of the medical examinations in both countries. This being the case, “what must be the consequence with those offices which already take risks at rates of premium too low even for the English lives?”

be any losses from fraud or bad investments), and prudence dictates that the *minimum* rate of interest should form the basis of operations which are to extend over a period of more than half a century.

COMPOUND INTEREST TABLE,

Showing the amount of one dollar per annum, forborne and improved, for any number of years, from one to sixty.

Years.	5 per cent.	6 per cent.	Years.	5 per cent.	6 per cent.	Years.	5 per cent.	6 per cent.	Years.	5 per cent.	6 per cent.
1	1.00	1.00	16	23.65	25.67	31	70.76	84.80	46	168.68	226.50
2	2.05	2.06	17	25.84	28.21	32	75.29	90.88	47	178.11	241.09
3	3.15	3.18	18	28.13	30.90	33	80.06	97.34	48	188.02	256.56
4	4.31	4.37	19	30.53	33.75	34	85.06	104.18	49	198.42	272.95
5	5.52	5.63	20	33.06	36.78	35	90.32	111.43	50	209.34	296.33
6	6.80	6.97	21	35.71	39.99	36	95.83	119.12	51	220.81	308.75
7	8.14	8.39	22	38.50	43.39	37	101.62	127.26	52	232.85	328.28
8	9.54	9.89	23	41.43	46.99	38	107.70	135.90	53	245.49	348.97
9	11.02	11.49	24	44.50	50.81	39	114.09	145.05	54	258.77	370.91
10	12.57	13.18	25	47.72	54.86	40	120.79	154.76	55	272.71	394.17
11	14.20	14.97	26	51.11	59.15	41	127.83	165.04	56	287.34	418.82
12	15.90	16.86	27	54.66	63.70	42	135.23	175.95	57	302.71	444.95
13	17.78	18.88	28	58.40	68.52	43	142.99	187.50	58	318.85	472.64
14	19.59	21.01	29	62.32	73.63	44	151.14	199.75	59	335.79	502.06
15	21.57	23.27	30	66.43	79.05	45	159.70	212.74	60	353.58	533.12

By the table of mortality at the age of 30, the probability of life is 34 years, by the Pennsylvania tables of Life Insurance, the premium charged at 30 years of age is \$2 $\frac{36}{100}$. *Question.*—What will this amount to at 6 per cent. compound interest? *Answer.*—In 34 years at 6 per cent. compound interest, one dollar will amount to one hundred and four dollars and eighteen cents (\$104 $\frac{18}{100}$), which multiplied by \$2 $\frac{36}{100}$, the amount of premium, will give \$246 $\frac{66}{100}$.

I would have the reader fully understand, as will be explained in the following paragraphs, that instead of \$2 $\frac{36}{100}$ being the sum placed at compound interest, that 45 per cent. has to be deducted, the actual amount to accumulate being only 55 per cent., or one dollar twenty-nine cents (\$1 $\frac{29}{100}$), which in 34 years would amount to one hundred and thirty-four dollars $\frac{29}{100}$ (\$134.39), instead of \$246 $\frac{66}{100}$.

Although the probability is that an individual thirty years of age may live 34 years, and his premium increase at a compound interest of 6 per cent. to a nominal \$246 $\frac{66}{100}$, yet it can be easily understood that a very large proportion of the insured, beginning with the very first year, will die, having paid only one or two premiums before their lives lapse; and let the reader always bear in mind that it is the first grand scheme of Life Insurance to provide not only for those who die young, but also to afford secu-

rity to those who live for a long term of years, that the amount of their insurance will be paid.

If 1000 persons, of 30 years of age, insure their lives, 6 of those persons will die in the first year. It would therefore require each to contribute sixty cents for that year to pay the loss of \$100 each, or \$600 in all to the representatives of these six persons.

In calculating the premium for Life Insurance, 20 per cent. is invariably added for expenses and commission to agents, which, on $\$2_{100}^{36}$, would be $\frac{47}{100}$.

The nett value of a premium is 55 per cent. of the gross amount charged to the policy holder. This 55 per cent. has to meet the "future increase of premium," "the deterioration of life," or to pay back to the party "the value if he surrenders his policy"—or "the sum for which another office would relieve them of their liabilities."

The Pennsylvania premium for \$100 at 30 years of age, is $\$2_{100}^{36}$

Deduct expenses at 20 per cent.

Deduct proportion for 6 deaths per 1000

Deduct nett value, being 55 per cent. of premium $\$1_{100}^{29} = \2_{100}^{36}

To arrive at the amount of premium for a person one year older, the nett value or $\$1_{100}^{29}$ is invested at $5\frac{1}{2}$ per cent. interest, which produces for the next year $\frac{7}{100}$, which, added to $\$2_{100}^{36}$, the second year's premium, gives $\$2_{100}^{43}$, the premium for 31 years of age.

The importance to the insured of an honest and safe investment of this 55 per cent. must be apparent. It is the fund which has to meet the subsequent deterioration of life, the (1_{100}^{29}) one and twenty-nine hundredths of life which pass annually away: for though of 1000 persons insured at 30 years of age, the deaths would only be 6 per annum for the first three years; yet at the termination of even that short period, there would be many of the policy holders whose health would have so deteriorated that if they were offered again for medical examination, they would be rejected. Besides, at 48 years of age the annual premiums received, and the losses by death, would equally balance each other; and after that, this reserved and invested 55 per cent. would be required to pay the annually increasing excess of death over premium.

It becomes absolutely necessary, therefore, for the *solvency* of a Company, whether the Company be PROPRIETARY, MIXED, or MUTUAL, that this 55 per cent. of the gross amount of premiums received in each and every year be permanently invested, and subjected to a careful examination and valuation by an Actuary, at the expiration of every seven years.

From the foregoing example of the "expense," proportion of "deaths," and "nett value of premium," it will be seen there is not a single cent to spare for profit, and the premiums which were sufficient for "the Pennsylvania," as a Proprietary Company, have been *assumed*, not *calculated* for Mutual Companies, and are so low that it can only be after a number of years that a SURPLUS MAY accrue from a saving on the 20 per cent. allowed for expense, and the careful selection of lives, being less than the loss predicated by the tables.

The amount of premium to be compounded at 6 per cent., is not, therefore, as has been explained, the whole premium of $\$2_{100}^{36}$ at 30 years of

age, but only \$1 $\frac{2}{10}$ %, which, if the insurer live the whole period of 34 years, will amount to 134 $\frac{3}{10}$ %.

I regret to say that in estimating the superior advantages of Mutual Companies in the prospectuses set forth by offices in Pennsylvania and Maryland and several of those to the eastward, I have not met with a solitary instance where a single cent has been admitted in the calculation for "expenses," "deaths," or "deterioration of life," but every "example" has assumed that each person would live out his expectation, at a full rate of compound interest on his whole amount of premiums, and so make a glorious profit for the members.

In the prospectuses of these Companies, long quotations are given in favour of Mutual Companies, but I regret to say with the most culpable disingenuousness. They omit the basis upon which the approbation of Mutual Companies has been expressed by De Morgan, Babbage, Chambers, and other writers on Life Insurance, viz; "THAT THE HIGH AMOUNT OF PREMIUM IS OF NO CONSEQUENCE, AS THE SURPLUS IS RETURNED IN THE SHAPE OF PROFIT."

The Equitable of London, whose great success is invariably appealed to, it must be remembered, enjoyed for many years a *monopoly*. The rates of premium charged by them were *enormously high*, seventy per cent. above the Pennsylvania rates—and though now reduced nearly *one-half*, are still infinitely higher for the younger lives than the premium charged by any Mutual office chartered in the United States. In addition to this, the Equitable of London invested their money in the purchase of government stocks at very low prices. From the year 1779 to 1786, the average price of the 3 per cents was about 60; from 1796 to 1816, it was below 60, and in the latter year, as the public funds began to rise in value, the mutually insured came to their declaration that only the first 5000 policies should be allowed to divide profits, there being at that time upwards of 9000 policies on their books.

By many Mutual Life Insurance Companies it has been assumed that a dividend of *two per cent.* per annum can be declared every five years, without the necessity of a patient and careful examination of their books. This is altogether a fallacy. It would require a very high degree of prosperity in an office to be enabled to grant a dividend of two per cent. per annum, every five years, and yet be in such a position as would enable them to wind up their affairs with honour and reputation. I would solicit the reader's careful examination of the following tables (B and B) showing the condition of 862 persons, whose lives are assured at the age of thirty, and who die in the due course of nature.

Of one thousand persons alive at 10 years of age, only 862 would reach the age of thirty. If these 862 persons were then to form themselves into a Mutual Insurance Company, and each person insure his life for \$100, the premium to be that charged by the Pennsylvania rates, viz.: 2 $\frac{3}{10}$ % per hundred, and a dividend to be granted of two per cent. per annum, or ten per cent. every five years, the result would be as shown by the following table, and an actual *deficiency* of \$39,323 would occur, the loss falling entirely upon 132 persons, who would have paid their premiums for

55 years and upwards, and arrived at the ages of 85, 90, 95, and 100, respectively.

Each person at 30 years of age is calculated to have the probability of living thirty-four years and four months, that is, to the age of 64 years and four months. But it will be seen that out of 862 persons alive at the age of 30, only 467 persons arrive at the age of 65, there being 395 *previous deaths* to provide for, each of their policies bearing heavy accumulations of dividends or assumed profits. If the society were then to be dissolved, there would be 467 policies unsatisfied; the whole amount of the funds would be \$39,505 $\frac{9}{100}$, and the average to the credit of each policy only \$84 $\frac{6}{100}$. So much for presumed profits and anticipating the funds of the Company. At the fourth period, or 50 years of age, the premiums and deaths balance each other, the losses by deaths (see the table B) amount to 9760; and while the premiums amount to \$9228 $\frac{69}{100}$, then it is the reserved 55 per cent. saves the remaining 634 policy holders from ruin, and the power of compound interest takes practical effect, and proves itself the very essence of Life Insurance.

The foregoing tables, B. and B., have only presumed a profit of two (2) PER CENT. per annum, and have shown that a dividend of that amount at the Pennsylvania rates of premium would require extreme caution—extreme good fortune, and a careful examination of the books, at each quinquennial period. In former editions of this work, a calculation was here inserted, having reference to the New York Life Insurance Company, and severe strictures were offered upon the hypothesis entertained in their Prospectus of fifty per cent. dividends. By a letter which we have received from a gentleman connected with that office, it would appear that by a supplement to their charter, April 5, 1849, Section 5th, “no dividend shall ever be declared and payable impairing the capital or accumulation of said Company.” And also by Section 20th, of Insurance Law of the State of New York, passed April 10, 1849, “no dividend shall ever be made by any Company incorporated under this Act, when the making such dividend would impair the capital stock; and any dividend so made shall subject the Stockholders receiving the same to a joint and several liability to the creditors of the said Company to the extent of the dividend so made.” So that the Company, both by special and general legislation, is restrained from making any improvident dividends.

The object of these dividends is, that all may have the benefit during life of any savings which may accrue, by the receipt of such interest as the Board of Trustees may from time to time declare, but it is fully understood that the principal forms a part of the reserve fund held by the Company—as the capital of corporate Companies is usually held—for the ultimate redemption of all its liabilities before distribution. The certificate of scrip issued on cash payments, specially subjects the dividend “to the rights of the Company under its Charter.” It therefore appears, that the New York Life Insurance Company are not only restrained from encroaching upon their reserve fund, however a part of it may be called dividend,—but the provisions of their charter are also of that nature, that should any defects be found, they can be remedied at their periodical investigation; any change in the operations of the system which experience may call for being within the power of the Trustees. We are obliged by the opportunity of affording

our readers this explanation, but at the same time would request them to observe the difference between those Companies which are restrained from employing injudiciously their reserve fund, and those whose charters require payment at *death* (see p. 15) of enormous dividends.

Life Insurance has been called the art and mystery of compounding money. If A. pays B. \$100, which sum B. places at 6 per cent. compound interest, at the end of the year he will have \$106; but if B. gives A. back \$4⁵⁰/₁₀₀ dividend, he (B.) will only have \$101⁵⁰/₁₀₀, and will be compounding at only one and a half per cent. In the so-often misquoted Equitable, of London, we have an extraordinary instance of the powerful, long-continued, and uninterrupted operation of compound interest. In the 86 years of this Society, their *net* premiums have amounted to \$95,338,180; they have paid claims to the amount of \$126,683,185, and have a capital still remaining of \$44,000,000, with liabilities amounting to \$71,000,000. But it must be borne in mind, when comparing the position of the Equitable, of London, with similar institutions in the States, that, in 1816, when the British stocks were 60, the Equitable were possessed of \$32,500,000 of stock, now worth 97, and they have never resorted to the modern practice of paying five per cent. commission on the premiums, by which they have saved \$5,000,000 from being alienated from the funds of the Society. As Insurance Companies do not publish a statement of their *liabilities* in the State of Pennsylvania, and have gone so far as to obtain an act of the Legislature to protect them from any such inopportune exposure of their affairs, the value of their policies outstanding can only be taken from an average deduced from the amount of premiums received. The Table C is an analysis of the statement of assets put forth in the years 1848 and 1849, by the Penn, advertising eighty per cent. dividends, a guarantee capital, and note of hand payments. Their premiums charged are correct; the business they have transacted in two years and eight months is a fair average; and may ultimately (say 20 years hence) afford a one and a half per cent. dividend; making it the more lamentable that the officers and trustees should have fallen into so grave an error as to promise eighty per cent. dividends, and allow their agents in different States of the Union to publish the most visionary and outrageous statements of an *imaginary* return of premiums.

The Company whose affairs are analyzed in the Table C for the years 1848 and 1849, have since published the statement of their business for the year 1850; and, it is to be hoped, have at last discovered the fatal mistake they made in attempting to force business by the promise of *eighty per cent. Dividends*. The total receipts of the PENN MUTUAL for the year ending 1st January 1851 have been \$115,195¹³/₁₀₀, and in accordance with the principles laid down (see p. 10,) and worked out in the Table C, it will be now shown what *is* and what "*should*" be the state of this Company, and the extent to which the interests of *all future* insurers have been compromised.

By a reference to Table C the reader will find the PENN should have

* One dollar *per annum* at one and a half per cent. in sixty-two years at compound interest will amount to one hundred and one dollars 13-100. One dollar per annum at six per cent. in sixty-two years (the same time, at compound interest, will amount to six hundred and one dollars 05-100. It is on six per cent. compound interest the premium is calculated.

No. 1. 1848. 55 per cent. Protection fund, - - -	\$ 24,000
Add interest on above 6 per cent., - - -	1,440
No. 2. 1849. 55 per cent. Protection fund, - - -	38,500
Total,	\$ 63,940
Add interest on above 6 per cent., - - -	3,838
To these add No. 3. For 1850. 55 per cent. Protection fund,	59,690

* Total Reserve or Protection fund, \$ 127,468

In accordance with the principles of Life Insurance, the actual possession of this sum, \$127,468 *free from any claim*, is requisite for the safety of the Insured.

The "losses" and "expenses" of the PENN from its commencement, are given in their printed statement, 14th January 1851, and afford a striking instance of the truth of scientific calculation as opposed to speculation—when contrasted with the "receipts."

LOSSES AND EXPENSES.	TOTAL RECEIPTS FOR THE YEAR.
Year ending Dec. 31, 1848, 12,300	44,158
Year ending Dec. 31, 1849, 32,650	74,360
Year ending Dec. 31, 1850, 60,678	115,190
105,583	233,703
Deduct expenses,	105,583

Balance, 128,120

By the previous calculation total Reserve fund required, 127,468

652

From this it will be seen that the actual difference, \$652, between the *receipts* and *expenditure* as given by the Company in their own statement, and the actual Reserve fund—by calculation—required by the principles of Life Insurance laid down in this work—is only six hundred and fifty dollars, a difference caused by policy fees and other trifling disturbing causes.

How different is the real state of the case when the statement of the Company is examined in connexion with these Eighty per cent. dividends—the *incubus* imposed on all future insurers—

80 per cent. Dividends of 1849 and 1850, -	\$ 60,760	
Interest on same due January 1st, - - -	3,645	
40 per cent. Dividend of 1851, - - -	32,456	
Interest on Guarantee capital, - - -	4,025	
Reserve fund required, January 1st 1851, -	127,468	\$ 228,354
Whole actual assets by statement, - - -	142,682	

Existing liability against the Guarantee capital, \$ 75,672

* *Reserve or Protection fund.* The following example will show the necessity of this fund. By the Penn Mutual's printed statement, 31 Dec. 1848, the gross receipts were \$44,000, claim for death \$5000, being *eleven cents* in the dollar of receipts—Dec. 31, 1849, gross receipts \$74,360, claims for death \$15,500, being *twenty $\frac{3}{4}$ cents* in the dollar of receipts. Dec. 31, 1850, gross receipts \$115,195, claims for death \$48,000, being *forty-one $\frac{3}{4}$ cents* in the dollar of receipts. In three years the claims for death increased from *eleven* to *forty-one* cents per dollar of the annual receipts.

So that if the affairs of this Company were wound up, and the "Guarantee Capital" is good for anything, it would be all required except four thousand three hundred and twenty-eight dollars.

The original intent of these Scrip dividends, was to *force business*—by inducing parties to insure under the prospect of immense immediate advantages. To grant Scrip and pay the interest only, considering the payment of the principal a thing to be postponed to the Greek kalends or some equally indefinite period, was the first idea; "but old father antic the law" stepped in and upset the calculation. There is an old saying, "death waits for no man," and the *lawyers* have discovered that the 80 per cent. SCRIP dividends, by the act of incorporation, *are payable at DEATH*. The following are the 14th and 15th sections of the act of incorporation under which the 80 per cent. dividends were granted.

§ 14. The officers of the said Company shall on the first Monday in January of every year cause a statement to be made of the affairs of the Company and a balance to be struck of the profit and loss account, *and if there is a surplus after paying all losses and expenses of the said Company, they shall credit each member with such proportion of said surplus as the premium paid by him or her or them on risks determined may be, to the aggregate amount of premiums earned during said year by the Company.*

§ 15. And in case of the death of any member of the said Company, *the amount standing to his credit at the time of his death, together with the amount of the policy in his name, shall be paid over to his legal representative or assignees within sixty days.*

So totally ignorant were the parties of LIFE INSURANCE that this is a FIRE INSURANCE clause, whereby the risk ceases and determines every year. Had they insured *lives* as "fire offices" do *houses*, only from year to year and not for *Life*, the thing might have answered! A one year's premium at 30 years of age is \$1³⁰/₁₀₀ by their own tables; whilst a whole life risk is \$2³⁶/₁₀₀, from which latter if 80 per cent. is deducted (\$1⁶⁸/₁₀₀), the whole amount left for expenses, risk, in fact for everything, is *forty-eight cents*, little more than one third of a one year's risk. However, all they imagined they would have to pay was the 6 per cent. on the 80 per cent. dividend, and now that the error has been discovered and that the Scrip is payable at death, an application to the Pennsylvania legislature has so far remedied the future—that the Penn Mutual *must* provide for *all* outstanding risks before they can credit any member with a profit, and the *future Insurers* will have to pay *ninety-four thousand dollars* for the benefit of their predecessors.

The CONNECTICUT MUTUAL have now by their statement 13,000 policies in existence, with a liability exceeding (21,000,000) Twenty-one millions of dollars. They have granted dividends, as they advertise, averaging 61 per cent. The Penn average 66 per cent. The "UNION of Boston" for 80 per cent., and other offices for any fancy dividend that may suit the state of the market or the opposition necessary to a rival establishment.

A supplementary table A has been added, showing what the result of a 40 per cent. dividend *must be*—viz: INSOLVENCY, BANKRUPTCY, and ruin to all. The number of lives taken are those of the *Carlisle* table, and the calculation is worked by the number of deaths which take place each year in accordance with that table—there is no mystification, no

equivocation—the Carlisle Table, so often quoted yet so little understood, is the *bona fide* basis of the calculation, and the *Carlisle* table itself is added (Table D) that the reader may judge for himself of the fallacies daily proposed by speculating offices.

At 37 years of age, by the Carlisle table of mortality, 5251 persons are alive. By table A these persons mutually insure each other in the sum of \$100, each paying the *annual premium* \$2 $\frac{90}{100}$, and making *annual dividends* of 40 per cent., which dividends are calculated as *paid*. Their expenses are taken at 10 per cent. on the premiums of the year—and every advantage is afforded to the insurers, notwithstanding all of which, it will be observed that in the thirtieth year they are bankrupt with 2771 claims unsatisfied. As *Quack Doctors* never practise surgery—so 80, 60, 50, and 40 per cent. dividend Life Insurance offices never employ professional *Actuaries*.

In examining table A the reader should fully understand, that the real insolvency of a Life Insurance Company actually occurs whenever its funds are not sufficient to cover all its engagements; “*whenever the sum remaining in hand does not amount to what an office charging similar rates would relieve them of their liabilities for.*” See p. 24.

The 5251 individuals in table A, ignorant of the principles of Life Insurance, would imagine they were doing a famous business until surprised by actual Bankruptcy; for example,

At the end of the first 5 years they had	11656	$\frac{10}{100}$	they should have had	34546	$\frac{32}{100}$
“ “ 10 “ “	19313	$\frac{01}{100}$	“ “	57194	$\frac{73}{100}$
“ “ 15 “ “	30847	$\frac{35}{100}$	“ “	105925	$\frac{57}{100}$
“ “ 20 “ “	39216	$\frac{31}{100}$	“ “	142408	$\frac{20}{100}$
“ “ 25 “ “	27237	$\frac{72}{100}$	“ “	159005	$\frac{34}{100}$
“ “ 30 “ “	bankruptcy,		“ “	158940	$\frac{40}{100}$

The foregoing example *it is to be hoped* will prove to *all insurers* the incompatibility of 40 per cent. dividends and solvency. The calculation is made from the Carlisle table of mortality, and with the numbers actually given in that table, as living and dying in each year, so that all misrepresentation on the part of *interested* persons can be fully tested.

IN LIFE INSURANCE THERE IS NO PROFIT. In a Proprietary Company there may be *profit* to the *stockholder*, but (it is repeated, for it cannot be too firmly impressed upon the mind) in Life Insurance, to the insurer there is no such thing as *profit*. The premiums are calculated in accordance with certain tables of mortality, and a certain rate of compound interest—to which is added a certain sum for expenses. It is calculated the whole of this sum will be required, and experience has shown that for many years it will be required. If then by any fortunate series of events it should happen that the whole sum should not be required, and that a small portion of it should remain unexpended, such unexpended portion is not *Profit* but *Savings*. For instance, let a person put by \$1200 for his household expenses for the year—at the end of the year, if he has, by provisions being cheaper, house-rent less—or any other fortunate circumstance—only expended \$1000, he will have *saved* two hundred dollars, but he would laugh at any one calling it Profit. So it is in Life Insurance, a *saving* may be effected—and every *five* years, when those *savings* are

actually and correctly ascertained, they may be divided; but, if the integrity of the office is to be preserved, the *bonus* must be ascertained *savings* from the past—and not, as in the case of the 80, 60, 50, and 40 per cent. dividends, “*presumed Profits*” chargeable to future insurers, and to a certainty eventuating in insolvency and bankruptcy.

If the dividends are a *reality*, pay them. They are either “something” or “nothing”—and the science of the Actuary proves they are an injury and a fiction.

It is generally asserted that no Mutual Life Insurance Company has been known to fail, but erroneously; an immense number have been obliged to wind up and amalgamate with other Companies, paying the value of their policies, that is to say, 55 per cent. on all premiums received anterior to the present year, and the premium of current year in full. David McPherson says in his *Annals of Commerce*:

“Out of above two hundred visionary schemes that were formed and carried into effect at the time (1726), only *four* Life Insurance Companies exist at present, viz., the Royal Exchange, the London, the York Buildings, and the English Copper Companies.” After the Equitable of London was established in 1762, a number of other societies were projected, “being for the most part, however, *false in principle and mischievous in effect*, and the names of which are now lost and forgotten.”—(*Pocock on Life Insurance*.) Mr. Babbage, the celebrated calculator, has justly remarked that “it is lamentable to observe the readiness with which men of wealth and character attach their names to Companies with whose *principles they are totally unacquainted*. The respectability of an undertaking is too often inferred from the names under whose sanction it is introduced; and the facts stated in the prospectus are believed to have been examined into, and are considered as vouched for.”

It becomes, therefore, essential for every one to examine and judge for himself, and not to be led away when selecting an office for insuring his life by high-sounding name; a want of proper attention to this point may be the means of occasioning disappointment and loss to the unfortunate individual, who, whilst *following the shadow, loses sight of the substance*.

It has been shown that no Life Insurance Company can, with security to its constituents, declare an annual dividend. Neither can these offices nor any Life Insurance Company, take *promissory notes* in payment of the premiums without placing their institution in a position of extremely doubtful stability.

The promissory notes have been given by the insurers upon a tacit agreement that payment shall not be called for, unless upon a fair general average upon all the notes being actually necessary;* and the calling up such a general average, would at once destroy the prestige of the Company's success, and seriously injure the prosperity of all concerned.

From what has been said, it is obvious the policies of all those offices which take NOTES as a part of the premium are perfectly valueless in any mercantile transaction, or when required as collateral secu-

* The “Mutual Benefit” commenced by taking 25 per cent. “cash” and 75 per cent. “note.” They now require 50 per cent. “note” and 50 per cent. “cash,” showing how egregiously wrong they were in the beginning—and still are. They have been obliged to sue many of the insurers to recover the value of the notes—with what success may be imagined.

urity; thus depriving the insured of the only benefit he can derive from a policy during his life. In Marine Insurance the policy expires with the voyage, therefore a note has only a limited period to run. In Life Insurance the party must die before the *humbug* is discovered.

All the expenses and deaths must be paid in CASH, and the reserved fund will consist almost entirely of notes without any collateral security, and which no broker would give five per cent. for.

As eighty per cent. dividends are not part and parcel of the scheme of Life Insurance, neither is the note system; nor the guarantee capital system; nor the low rate of premium system; all of which are false in principle and mischievous in effect, and have been introduced by speculators totally ignorant of the whole science of Life Insurance.

Mr. Bethune says, in his highly valuable work: "The principal features to be traced amongst the inducements held out by offices recently established, are the advance of *money* to assurers upon approved personal security, and the permission to pay a portion only of the premium due, leaving the remainder to be repaid at compound interest, both of which plans are at variance with the original object of Life Insurance, which was to encourage habits of prudence in individuals by enabling them to make provision for their families."

By the promissory note system, if a man of thirty-five pays only *one-quarter* of his premium by notes for thirty-one years, the amount of his policy will be only *two-fifths* of the amount he pretends he is insured for; and at the hour of his death he will feel that he has been practising upon his wife and children a selfish fraud, by inducing a belief that they will receive \$5000 when he knows they will only obtain \$1707, the rest of the policy being required to pay the PREMIUM NOTES.

A GUARANTEE CAPITAL is in fact no capital, but useful as a means of paying five per cent. per annum to certain individuals for their own profit and emolument. An actual paid-up capital in Life Insurance is invested and earns in the public securities its own dividend of 6 per cent.; but a guarantee capital is a note placed in an iron safe, promising at some time to pay somebody, a sum for which no consideration has been received, and for which the giver is to receive a percentage of five per cent. A stockholder in the one case has a direct interest in the prosperity of the institution, because he has paid his money, and fears to lose it; in the other, the maker of a guarantee note has to foster in the insurers a belief in a nominal prosperity, by granting imaginary profits to them, and thus securing his own annuity from the Company. Much odium has been thrown on Proprietary Companies by the oft-repeated "assertion" that they take the *profits*, which justly belong to the assured. A Mutual office that gives *five per cent.* for a guarantee capital, is precisely similar to a Proprietary Company that pays its stockholders *eleven per cent.*—only the Proprietary Company have the *money actually invested*, whilst the "Mutual" have promissory notes of questionable value. The following graphic description of a guarantee capital, published in the New York Herald, 15th May, 1850, is worth attention. "*Ex uno disce omnes.*"

"Several financiers of this city (being then, as now, supreme controllers of the company) determined to raise a 'guarantee capital' of \$150,000. It was done,

and thus: one had unencumbered property to the amount of about \$7000 or \$8000. On this he gave a mortgage to the company for forty thousand dollars! Another had unencumbered property worth, I think, not over \$1500; and yet he had the assurance to give upon it a mortgage for thirty thousand dollars! Other guarantors (?) acted even more rascally, but not on quite so extensive a scale. Thus it has been shown that these individuals took \$70,000—nearly one-half of the ‘capital’—and gave as security not more than \$10,000 at the outside, and received at the rate of 6 per cent. per annum for the use of their mortgages. Had this capital been legal, the above-named financiers were cheating their brother stockholders out of \$2000 a year: but as it was altogether illegal, the amount filched was \$1200 a year. By the way, none of the mortgages alluded to were recorded; and if the capital even had been a lawful one, it would thus have been worthless.”

There is no analogy between guarantying the payment of a commercial note, which is put into circulation—for which a consideration is received, and which becomes due at a given period, and the so-called guarantee capital of a Life Insurance Company, which guarantee notes have no one principle of fixedness, and are in the safe-keeping of the very persons who, if the notes were worth anything, would be liable for their payment, and who have the power to withdraw themselves from the institution whenever they foresee difficulties arising.*

In entering upon the subject of low rates of premium, I must beg the reader to study the figures which will be set before him, and I then feel confident he will at once see the impossibility of these low premium offices meeting their engagements after a few years, when their expenses and losses begin to eat them up.

The lowest rate which can be used at 30 years of age is \$2 $\frac{1}{100}$ per \$100, and this can only be adopted by a Proprietary Office with a *large actual paid-up capital*, to meet the extra claims in the early years of the Office. This premium of \$2 $\frac{1}{100}$ will allow deaths, per table, - 60

Deterioration, - - - - - \$1.20

For expenses, - - - - - 15 or 7 $\frac{1}{2}$ p. c.

The extra expenses, until the amount of the premiums is sufficiently large, *must* be paid BY CAPITAL, and it is this early assistance to premiums by capital, which gives capital a legitimate claim at a future period for a profit from Premiums.

But should the business, either from a want of knowledge of the officers of the society, or the contracted nature of their plan, and the consequent limited amount of their transactions, be allowed to stand still, or should the Institution lose public confidence, these rates will not suffice for a Proprietary Company.

The value of death, and the deterioration of life, are fixed by tables of mortality, the result of extensive statistical inquiry carried on through the nations of Europe for one hundred and sixty-three years; these two items, therefore, death and deterioration of life, must remain the same, whatever the nature of the Company, whether Proprietary, Mutual, or Mixed, and the *pro rata* for them is beyond the reach of speculation or speculators. These two items have been shown to be, the first $\frac{60}{100}$ for deaths in

* When an insurer applies, the Guarantee Capital is a CAPITAL. When the Tax Collector calls, the guarantee capital is NO CAPITAL. *Alter et idem.*

the current year, and the latter $\$1\frac{29}{100}$ for future deterioration and nett value of policy : together, one dollar and eighty-nine cents.

I have now before me the rates of a Company who fix their premium at 30 years of age at $\$1\frac{58}{100}$ per \$100, or ($\frac{31}{100}$) thirty-one cents per hundred below the prime cost, without allowing a fraction for expenses, commission to agents, &c., &c., &c. Other Companies charge at 30 years of age $\$1\frac{78}{100}$, or $\frac{11}{100}$ eleven cents per hundred below prime cost, without allowing a fraction for commission (10 per cent.), expenses, &c., &c., &c. The way to test a low premium is by comparing it with an annuity. For instance, a person aged 30, pays to an Insurance Office one hundred dollars, for which they agree to pay him a certain rate of interest as *long as he lives*. The value of the annuity at 6 per cent. would be 13 years, with which divide the \$100, and the amount of the annuity is seven dollars and seventy cents per annum. If the person then goes to a *low price* Insurance Office and insures his life for \$100, so that at his death he will receive his money back ; he pays a premium of $\$1\frac{58}{100}$ per \$100, which, if deducted from the \$7.70 annuity he receives, will allow him a clear interest for his money of \$6.12 per cent. per annum.

Let us apply this test to the Insurance and Annuity tables of rates in use by an "everything Company," published with their prospectus, and of which the pamphlet now before me states "four editions of ten thousand each are completely exhausted."

The column headed nett interest of money, I have added that the reader may see at a glance the clear investment offered to him, should he imagine the possibility of any public stocks or mortgages that would yield such *enormous* interest, over and above the necessary 10 per cent. commission to agents and all other expenses. As the party would have his principal returned at death, I do not see how the clear investment at 30 years of age can be $\$6\frac{54}{100}$ per cent., and at 67 years of age \$9.04, unless there is a preference given by mortgagees and fundholders to elderly gentlemen and ladies.

Showing the amount of Interest CLEAR of all Expenses, which must be realized to pay the Annuity, and return the \$100 at the death of the party.

Age.	Insurance on \$100, payable at death.	Annuity, paya- ble on \$100 du- ing life.	Excess of Inte- rest obtained by the party.
20	1.33	7.87	6.54
25	1.53	7.94	6.41
30	1.78	8.09	6.31
35	2.06	8.41	6.35
40	2.44	8.86	6.46
45	2.80	9.42	6.62
50	3.45	10.20	6.85
55	4.34	11.28	6.94
60	5.25	12.82	7.57
65	6.41	15.02	8.61
66	6.72	15.56	8.84
67	7.09	16.13	9.04*

* These gentlemen certainly must have been their own ACTUARIES. There is an old saying about a man being his own lawyer, which equally applies to Insurance. These persons must have had very funny ideas of life annuities.

That I may not be imagined to rest upon my own opinion, I would call attention to the following extract from the very valuable work on Life Insurance and Annuities, published by "the Society for the Diffusion of Useful Knowledge." Speaking of competition in Life Insurance, the author says:—

"The great evil to be apprehended from this competition is the reduction of premiums to such an extent as will prove incompatible with the permanent stability of the office; and already have one or two offices advertised rates, which, after deducting the commission allowed to agents, will be found at some ages less than the premiums obtained by calculating from the Equitable experience at 3 per cent. Another office which advertises the rates at which it will grant annuities and assurances, offers terms which in some instances allow an absolute interest of (equal to $\$5\frac{7}{100}$) £5 15s. per cent.: as an examination will show £100 may be laid out in the purchase of an annuity, out of the yearly receipts of which the premium for assuring the £100 in case of death may be paid, still leaving the difference, £5 15s. (equal to $5\frac{7}{100}$ per cent.), to be enjoyed by the party. It is scarcely necessary to state what must be the result.

Note by the Editor.—"This paragraph, which refers to the Independent West Middlesex, was written before that nest of ——— had run its race, and exposed in its true colours the gross fraud upon the public."*

Can any sane man imagine, when he insures his life, that the Company from whom he obtains his policy, are philanthropists who, out of their own pockets, intend to endow his widow and children with a competency? If there be any such, let him deceive himself. The Company will pay only so long as the premiums paid by the insurers are equal to the losses, and what is of greater consequence, sufficient for the *expenses*.

In a low-priced office the climax will be arrived at in about 17 years, after which period there will be a deficiency, and the ruinous effects of too low a rate of premiums will become apparent to the public generally.

The insurer must remember that offices have unjustly refused, at the time of the death, to pay either the amount assured or to return the premiums, on the ground of error in the description of age—although no fraud was intended or reasonably suspected. Legal objections of a technical nature have frequently succeeded in inducing claimants to forego a part or the whole of their demands, without the office injuring itself by appearing to be of a litigious character. *And I have heard of an office the trustees of which boasted of their power to litigate a claim for three years.*

The number of offices which act upon these principles are few; but whilst such offices do exist, the public should be on their guard, and make the necessary inquiries before effecting any insurances with them.

These guarantee capital offices, note offices, loan premium offices, and 50 per cent. per annum (to say nothing of still larger) dividend offices, whether

*The above office, the Independent West Middlesex, is the one upon which Mr. Thackeray has founded his novel of "*The Great Hoggarty Diamond*." By the Railway and Commercial Gazette, March 30, 1850, I perceive the Independent Mutual has just closed, by an act of bankruptcy, its philanthropic career "of very low premiums for the benefit of injured insurers."

they start as Proprietary or Mutual, are not legitimate Life Insurance Companies.

In ninety-nine cases out of a hundred, the only preference for the Mutual system is, that the first step, the CHARTER, can be procured from the Legislature without the expense of a dollar, there being no tax on their letters patent. The next thing is to obtain a Secretary or Actuary—on speculation; a President—on speculation; a Trustee, who is a printer,—on speculation; and the Company is organized—on speculation. If a sufficient amount of premiums are taken, the officers can be remunerated only by an appeal to a jury; if not, they are expected to work for promises. The Trustees give their names, but nothing else—and it is within my own knowledge that a chartered Life Insurance Company of the State of Pennsylvania did, through the Secretary, borrow one hundred dollars to pay the preliminary expenses of advertising their stock, not a single Trustee being willing to give a cent in advance for what they said might prove “a dead horse;” and yet, within twelve months this company had liabilities outstanding to the amount of \$387,620, and in less than another twelve-month, three supplementary acts to their original charter. On their last appearance at Harrisburg, in order to be made “a Mutual,” the Pennsylvania Legislature required a statement of their assets, debts, and liabilities, which I now publish, as a specimen of what may be the actual funds of a Philadelphia Life Insurance Company. Strange it is that with such a statement as the following before them, any persons could be found with sufficient trust in the word “Mutual” to imagine that it possesses the power to galvanize a Company.

Presented to the SENATE of the LEGISLATURE of the State of Pennsylvania, and referred to Committee of City and County, on application and grant of Mutual Principle.

RECEIPTS OF THE EQUITABLE LIFE INSURANCE COMPANY TO 13TH OF APRIL, 1850.

Capital Stock (instalment received,) - - -	\$15,800.00
Premiums received, nett in cash, - - -	16,973.45
Interest received, - - - - -	1,144.20
	<hr/>
	33,917.65

ASSETS, APRIL 13, 1840.

\$18.500 in Pennsylvania, City, Pittsburg, Cincinnati, Spring Garden and Kensington Stock. Cost,	16,552. ⁸⁴ / ₁₀₀
Bills receivable, - - - - -	1,199. ⁹¹ / ₁₀₀
Mortgage, - - - - -	400.00
Cash, - - - - -	869. ⁰⁶ / ₁₀₀
Bal. due on 1350 shares of Capital Stock, } <i>liable to call on 15 days' notice,</i> }	\$22.900
	<hr/>
	\$19,021.81

May 5th, 1849—policies in force amounted to \$387.620.

Certified by “the Secretary and Treasurer,” to be a correct statement from the books of the Equitable Insurance Company.

Philadelphia, April 15, 1850.

April 13th, 1850—212 policies in force, amounting to \$319,920.

If the assets (\$19,021 ^{\$1}/₁₀₀) are deducted from the receipts (\$33,917.65), it gives the expenses \$14,895 ^{\$1}/₁₀₀.

The advertised capital stock of the Equitable (of Philadelphia) is two HUNDRED AND FIFTY THOUSAND DOLLARS, the whole amount paid in. See their Secretary and Treasurer's return to the Senate—is only *fifteen thousand eight hundred dollars!!!* To this \$15,800 of capital stock, add \$1144 *Interest*, and \$16,973 *Premiums*, and the whole of their receipts to the 13th April, 1850, nearly two years, amount to \$33,917. The available assets of the Equitable on the 13th April, 1850, consisted of \$16,552 *Public Stocks*, \$869 *Cash*, \$400 *Mortgage*, and \$1199 *Bills receivable*, making a grand total of \$19,020.

By the return to the SENATE, 13th April, 1850, the total receipts were:

Total assets,	- - - - -	\$19,020
Expenses,	- - - - -	14,897—\$33,917

In becoming a "MUTUAL" it is worthy of consideration—against what fund the previous expenses of the Equitable will be charged? In accordance with the customs of LIFE INSURANCE, the capital stock of a Proprietary Company is liable, the stockholders having to bear the brunt of their own speculation. In this view of the case we have capital stock, \$15,800

Known (?) expenses to 13th April, 1850, - - - 14,897

BALANCE OF CAPITAL STOCK UNEXPENDED, - - - 903

If the expenses are to be charged against the persons *already insured*, and the capital stock is looked upon as an *undiminishable and irresponsible fund*, the exclusive property of the stockholders, by virtue of which they claim 1530* votes, (that being the number of shares subscribed,) and the management of the Company; then, in that view of the case—

The gross amount of premiums received, is - \$16,973
Known (?) expenses to 13th April, 1850, are - 14,897

AND THE BALANCE OF PREMIUMS REMAINING, is - \$2,076

However unpleasant the former position may be for the stockholders, the latter is infinitely worse for the INSURED, who have been innocent of any participation in the mismanagement, and therefore have a right to their funds whole and intact. The capital stock being expended (except \$903), the business of the Company derived from the amount of Premiums is not sufficient to pay the expenses and do justice to the insurers; these expenses must eat up the premiums.† By their Secre-

* Ten dollars a share. Previous to this statement being laid before the SENATE, it was asserted three thousand shares had been subscribed, and that the premiums received were enormous. A few shares of the capital stock were offered at auction by Moses Thomas & Son, and found a *bona fide* bidder at—*four dollars a share*. A call for unpaid balance would test its value.

† My friend, R——, a clever actuary, of wide-established reputation, had the misfortune to take charge of a young Life Insurance in Westminster. The Directors were all wealthy men, of high standing in the world. R——'s predecessor had cut his throat; but that was supposed to have been the consequence

tary's statement to the Senate on the 13th April, 1850, there were only 212 policies in force; and the amount insured had *decreased sixty-seven thousand seven hundred dollars*, as compared with the 5th May, 1849, when the Company had only been eleven months in operation. Further comment is unnecessary.

Having demonstrated that "eighty per cent. scrip dividends," "note of hand payments," "low rates of premium," and the whole list of modern improvement in premiums, are not part and parcel of the scheme of Life Insurance, and must eventually lead to distrust and dishonour, it is necessary I should state how the PROFITS of a Life Insurance Company are to be ascertained. JONES, says that profits are "the accumulation of premiums in hand, *greater than the amount which, according to the valuation, ought to be reserved*, the surplus denotes so much *profit realized by the Company*, and as such, may be appropriated by them, *the sum remaining in hand being that for which an office charging similar rates would relieve them of their liabilities.*" P. 1093.

The premium on a policy granted at 30 years of age, being \$2.36 per \$100; at 40 years of age it would require a credit to *that policy* of \$14 $\frac{20}{100}$ before any profit could arise; at 50 years of age, \$36.40 to the credit; and at 60 years of age, \$85 to the credit, as these would be the sums in hand, which would be required by an office charging similar rates, to relieve another office of their liabilities. The premium at 60 years of age, with profits, is \$7 $\frac{47}{100}$ —the interest of \$85, at 6 per cent., is \$5.11, which, added to \$2.36 = \$7.47. If the reader will refer to the Table A, he will find that at 60 years of age, there are 559 persons surviving, and the accumulated fund of that year amounts to \$47,836. If this is divided, it will give eighty-three dollars and eighty cents to the hundred dollars originally insured. The interest of this, \$83 $\frac{78}{100}$, at 6 per cent., is \$5 $\frac{92}{100}$, which, added to \$2 $\frac{36}{100}$, the original premium, makes \$7 $\frac{38}{100}$, the amount charged at 60 years of age, and which would be required by a prudent office, to take *good and bad lives*, but for which amount the same office could not guaranty the payment of accumulated profits, which, by a reference to Table A, will be found to be \$93 in addition to the \$100 originally assured. It has been before stated that \$1 $\frac{20}{100}$, or 55 per cent. annually of the premium at 30 years of age, should be set aside to improve at 6 per cent. If this is done, at 40 years the accumulation (9 years) will be \$14.82 per \$100 insured, the sum required to transfer the liabilities being \$14.20, together with the *current* premium. At 50 years of

of a constitutional melancholy. R——— had not been long in the office, when he discovered that the Directors were a regular set of "DESTRUCTIVES"—ignorant of the principles of Life Insurance, limited in their views, litigious and penurious. He, of course, knew what must be the result, but was determined not to follow his predecessor's example, or allow himself to be vexed, as the business was becoming "small by degrees and beautifully less." At last the climax arrived, and one forenoon R——— walked into the Board room, and with his usual good-humoured, jovial smile, blandly informed the Directors that "he had *just eaten the last premium for lunch*," and should be obliged by their further instructions. R———'s advice, when too late, was taken, and the office was "amalgamated." R———, in telling the story, always adds, "They only had two actuaries—the first cut his throat; the second cut his stick. I was the latter."

age, the \$1.20, improved at 6 per cent., would amount to \$13 $\frac{53}{100}$; the sum required to transfer the liabilities being \$36 $\frac{46}{100}$ in addition to the current premium. This yields a *realized* profit to the Company, in the *twentieth year*, of \$7 $\frac{13}{100}$ per \$100, and considering the higher rates of premium in the first years of the existence of the LONDON EQUITABLE, afforded the 1 $\frac{1}{2}$ per cent. dividend granted by them in A. D. 1782. It has been already shown that at the age of 49, the premiums and deaths being balanced, the association is at its highest state of prosperity.

The above is the only way in which the profits of a company can be ascertained. It requires the services of a regular actuary, and gives much trouble; but it ultimately saves a company from debt and dishonour, and the known prudence of the association more than repays, by the receipt of premiums, any expense which may have been incurred. A Life Insurance Company that cannot afford to pay for the services of properly qualified officers, cannot afford to incur liabilities which may amount in a very few years to from four to forty millions of dollars. The Bank, the Merchant, the Ship-builder, the Store-keeper, the Mechanic, the Government, do not take their officers or clerks on SPECULATION, and make their remuneration dependent upon the Proprietors having money at the end of the year to pay them. If they did so, they would be regarded as insolvent speculators, without capital. Why then should Life Insurance Companies, who charge twenty per cent. on every premium for expenses, who incur immense liabilities in their corporate character, be allowed to do that which no mercantile establishment could do and retain its credit for an hour? Any idler—any broken-down individual—is considered sufficient for the official duties of a Life Insurance Company—and the more inefficient the employee may be, the greater sympathy he obtains from his friends and patrons. The interests of the insured are never looked to for a moment, and the conclusive assertion, "*it will last my time*," is a sufficient apology from all concerned to their own consciences, for the mis-management of the affairs of the corporation. I have heard of hospitals being built for fools, because, as they could not provide for themselves, the public were bound to do so; but Life Insurance Companies, where the interests of the widow and the orphan are held in sacred deposit, are the last places where protected incapables should be supported.

Before a dividend, bonus, or profit in any shape is declared by a Life Insurance Company, the amount of premiums received on *each* policy with compound interest must be ascertained. Then the sum which has been paid for expenses and deaths, is added to the amount to be reserved by the Company as the value of the policy; these are deducted from the compounded amount of premium, and the difference between them is the proportion of profit *realized* on the policy.

In the constitution of Life Insurance Companies in the United States, two most important *honorary* officers are invariably omitted. These are the AUDITORS to whom the Actuary's report is presented for examination before the general meeting (which the insured should insist upon) to be held each year.

The AUDITORS examine the Actuary's account—they have it proved—they make the Actuary explain the receipts, the compound interest, the

expenses, the valuation of policies, and the basis upon which he proposes to grant a bonus or dividend—and IF all this is satisfactory, they *sign* the REPORT, and thus sanction its presentation to the general meeting. The AUDITORS must be men of high commercial standing, and be paid for their examination of the accounts; but in all other respects, unconnected with the company. All dividends should be voted at general meetings, and the report of that general meeting should be printed for general circulation.*

I have now before me the prospectus of a Mutual Company of some three years' standing, which says (p. 21): "At the end of every year, should the losses of the company in that year fall short of the losses called for by the Carlisle tables of mortality, the trustees *shall pass to the credit of the sinking fund a sum equal to the deficiency*, and the sinking fund so credited shall be applied to the payment of losses which shall occur in any year over and above those called for in said tables, and *when the sinking fund exceeds one hundred thousand dollars, the board of trustees may, if they deem it expedient, divide the EXCESS beyond that sum as profits.*" By a reference to Table C, p. 16, it will be seen that this Company has not a *cent* to divide as profit, much less a sinking fund of one hundred thousand dollars, created by "the losses of the company falling short of the losses called for by the Carlisle table;" and never will have; and yet, they have twice declared dividends of eighty per cent. Had proper AUDITORS been appointed, could this have been the case? Would commercial men of standing have signed their names to a financial report, and taken the *onus* upon themselves of such dividends being declared? I think not.

It has been the policy of "Mutual" companies to create an opinion that "MIXED" or "Proprietary" companies charged not only too high rates of premium, but also made immense *profits*.† These new Mutual Companies therefore promised beforehand to divide—what might never have an existence, and what certainly cannot exist for several years to come. In reference to this point, the distinguished Actuary, Mr. Griffith Davies, remarks, "The evil of charging excessive premiums cannot, however, long remain in a country where capital is allowed to flow freely from one channel to another, as the natural effects of competition must necessarily reduce the profits on LIFE INSURANCE to the level of that derived from other species of investments; *on the contrary*, the peculiar nature of the subject renders it extremely dangerous lest the rates for life insurance should be so far reduced as to diminish the security of those who may select this mode of accumulating their savings for the benefit of their families; for, if the premiums charged by societies established for these purposes should, by excessive competition, be rendered inadequate to the payment of the claims which, sooner or later, must come upon them, whatever honour, wealth, or probity the present managers of them may possess—whatever capitals they may boast of—or however prosperous they may *appear* to go on, even for a considerable time—the result must ulti-

* The Actuary's report should be ready for the insured and stockholders at least ten clear days before the general meeting.

† As has been shown, the 5 per cent. guarantee (*no*) capital of a Mutual Insurance is exactly equal to eleven per cent. of a Proprietary (*paid*) capital.

mately terminate in LITIGATION, disappointment, and ruin; and instead of a national benefit, Life Insurance in such a case would inevitably become a national calamity."

The Pennsylvania Offices make no annual report—they declare a dividend—they assume a profit—but the insurer, the party most interested, has no means of knowing upon what data these profits are granted—the shadow may be thrown upon him to prevent his thinking of the substance; and for a few dollars—for four dollars and eighty cents per one hundred—paid to him personally, he sells the inheritance of his wife and children, their right to thousands of dollars. The judicious insurer may feel himself aggrieved by these *quasi* benefits thrust upon him—he may remonstrate, but he is bound hand and foot, the special legislation of this State having declared that no Insurance Company—whether Life, Fire, or Marine—chartered by the State of Pennsylvania, shall be required to publish its liabilities. They are declared solvent by the special act of the Legislature, and with this the insurer must be content, to whatever extent the bubble may be inflated.

The Legislature of Pennsylvania, acted upon by the Insurance Companies of Philadelphia, has passed many "special omnibus supplements," hostile to foreign Insurance Companies. But the subject of foreign insurance has never been brought openly before the Legislature as a part of the policy of the State, and has never been viewed by that body in its proper light, as requiring, not its hostility, but its non-interference—it has never been viewed as the ultimate means of relieving this State from a great portion of its debt by the investment of the accumulated funds in the public securities, and thus, by creating a demand for state stock, ultimately allow the interest to be reduced.

Far from even common toleration, every annoyance has been thrust upon the foreign offices—heavy taxation, amounting almost to prohibition, fines and penalties, and "PARTY" declarations of future special legislation under the influence of private individuals. Already the foreign offices have taken counsel of themselves—have taken counsel of the most celebrated constitutional lawyer of this country—and the reply has been, "Whatever tax the Legislature imposes upon Insurance Companies chartered by the State of Pennsylvania, foreign Insurance Companies must pay; all other taxes are *unconstitutional*." If an action for penalties is brought against an *alien*, he can at once remove the case into the Supreme Court of the United States, thus passing over all local prejudices or influences—divesting the case of "expediency"—and leaving the question on the true ground—CONSTITUTIONALITY.

The foreign Insurance Companies necessarily must at all times have a preference with the public over the new Insurance Offices of Philadelphia,*

* I confine my remark to new Insurance Offices as no imputation can be thrown upon the "Pennsylvania" or the "Girard," of resorting to the Legislature. The former office, chartered in 1812, declared this year, 1850, its first dividend of 2 per cent. per annum. The "Girard" also declared this year a dividend of 2 per cent. per annum for the last five years. Conduct like this deserves the confidence of the public. The National Loan Fund equally deserves the same praise.

if only for the simple reason that their charters are free from that incessant special legislation which renders the insurer in the home office constantly subject to have his property and his rights legislated away. It may suit the trustees of a Life Insurance corporation to have their defects, their squabbles, their ignorance, annually salved over by secret special enactments—but the public, the great body of insurers, do not approve of *their* contracts being hourly subjected to violation without their knowledge—without being consulted—and without their consent.

For the security of the insured, the capital stock of a Life Insurance company should consist of a large number of shares of small amount. The shares should be allotted, and not subscribed for; and the extreme number of shares in any person's hands should be limited.

By a large number of shares, the stock is distributed more equally amongst the public—by a low percentage paid up, it is within the reach of every one. Take a capital of one million dollars—divided into 40,000 shares of \$25 each. Two dollars and fifty cents per share would make \$100,000 paid in, and at any time should more capital be required, a call of FIFTY CENTS a share would produce \$20,000. By the shares being allotted upon application, a solvent Proprietary is obtained, and the number of shares allotted to each person being limited to say one hundred, there is no difficulty in realizing any calls which may be made on the stockholders; and it effectually prevents a body of fourteen or fifteen persons, in whose hands a majority of a small stock—already eaten up by expenses—may be vested, from having an entire control over the affairs, and in operation rendering it a private institution with corporate powers and limited liability.*

Of all the evils of Life Insurance most to be dreaded—and to which small Proprietaries are peculiarly prone—is an inclination to LITIGATE. No man desires to leave a lawsuit as an inheritance to his widow and children. Yet, where a Life Insurance Company has an inclination that way, the best intentions of the insurer may be thwarted, and the machinations of a dishonest company be successful. A policy of Life Insurance is not, as generally supposed, a simple contract—but it is a contract upon a warranty. In effecting an insurance, four different papers are signed by four different parties, viz.: the applicant, the medical examiner, the family physician of the applicant, and by a personal friend; and these four papers must agree, or the warranty is bad, though three of the documents are never seen by the insured. If any fact is withheld, though *not material* to the cause of death, the policy is void. For instance, a man drowned at sea, having omitted to state that he had had an attack of gout, would void the policy; though the fact of his having had the gout, is not material to his being drowned.

It therefore behoves a person about to insure his life, to have special regard to the character of an office on this point: Should he find, on inquiry, that an office is inclined to litigate *any* claim—that the trustees prefer tedious and vexatious delay to arbitration—that they do not meet

* In such a case the trustees may exhaust the finances of a company in declaring dividends to *themselves*, to the ruin of the insured.

demands upon them of *whatever nature*, in a spirit of equity and liberality—that, rather than court inquiry into the justice of the claim, they endeavour to evade it by malicious insinuations or fraudulent trickery—in such cases, let the insurer avoid the office as he would a pestilence, no matter how tempting their offers may be.

The causes which chiefly lead to litigation are low premiums and high dividends or profits—and note of hand payments,* and all other modern “benefits,” under whatever name they may be granted.† These are the overtrading of Life Insurance—and, to repeat the words of Mr. GRIFFITH DAVIS, “Whatever capitals they may boast of (*cash*), or however prosperous they may *appear* to go on, even for a considerable time—the result must ultimately terminate in *litigation, disappointment, and ruin.*”

I trust I have now placed the principles of Life Insurance before the public in simple language that can be understood—and that the insurer will be able to form his own opinion of the office he insures in, without the interference of interested parties. If conducted upon sound principles, there is in fact no difference between the different systems of Proprietary and Mutual—the former charge less, the latter a higher rate of premiums. The former have a paid-up capital—the latter create their own capital from the excess of premium. If a Proprietary Company charge at 30 years of age, \$2 $\frac{9}{10}$, and a Mutual Company \$2 $\frac{3}{10}$, the difference is $\frac{3}{10}$ per \$100 insured, or 16 per cent. excess upon the amount of premiums. If equally successful, and in the FOURTH year of their existence, the Proprietary Company receives \$100,000 premiums, and has a paid-up capital of \$100,000, the relative position to the Mutual would be that the Mutual would receive \$116,000, of which sixteen thousand would be invested as *capital*, the remaining \$100,000 being equally required by both companies to meet their *engagements*. If the premiums received remained the same in both institutions for 5½ years, the \$16,000 per annum excess of premiums would, at compound 6 per cent. interest, accumulate to \$100,000, and thus, at the termination of the TENTH year, both companies would be upon an equality. But the annual \$100,000 would not be divisible for dividend or bonus until a fair valuation had been made of every policy. Mutual offices should pursue the rule laid down by Mr. BABBAGE in his account of the system of MUTUAL Assurance, wherein he observes, “A mistake not unfrequent, though one which ought to be most carefully guarded against, is the consideration of accumulated capital in the possession of a company at any period for the payment of its contracts, as the enjoyment of so much positive profit. * * * * * This accumulation is *capital*, liable to be reduced or expended in fulfilling the engagements of the society, and *not profit*, which may be fairly distributed among the members.”

As yet, the subject of Life Insurance has been brought before the people of the United States only in its simplest form; and few persons

* The note of hand system of the United States is totally different from the “HALF CREDIT” of English offices, and the two must not be confounded together. The latter is only a five years’ policy, the insurer paying a heavy fine should he wish at the expiration of that time to convert it into a whole life policy.

† A guarantee capital, added to a consumptive office, is like a stone thrown to a drowning man. The additional weight only sinks him the sooner.

have allowed themselves to inquire into the magnitude of this vast provident institution. However numerous Life Insurance Companies may be, they are part and parcel of the one system—the great national savings bank for the widow and orphan—the accumulated savings of twenty millions of persons. I have now before me twenty-two prospectuses of different offices, possessing on an average incomes exceeding seventy thousand dollars per annum, or one million five hundred and forty thousand dollars for the whole twenty-two. As doubtless there are other offices whose prospectuses I do not possess, the whole may be estimated at two millions of dollars per annum, as the present *limited* investment of the people in this description of security. After paying losses and expenses, therefore, for twenty-five years, IF these offices are solvent, they will possess amongst them accumulated funds liable for their contracts, of thirty millions two hundred and fifty thousand dollars; but if a healthy system is pursued, and this species of security is regarded with implicit confidence, as it should be by the provident, then the accumulated funds will not be less than from *three to three hundred and fifty millions of dollars*; and the liabilities which will be amply provided for, will amount to thousands upon thousands of millions of dollars eventually, to be distributed amongst the more unprotected and helpless portion of the community.

I would ask every thinking man in the community, therefore, if this subject of LIFE INSURANCE is not one which deserves the most patient and careful examination? If it be not of an importance second to none other in the States? requiring science, talent, and probity in its conduct? I demand of them whether the welfare of the community is not best consulted by the full exposure of every scheme which emanates from the ignorant pretender, and is foisted on the people by insidious and designing men? I would have the right-minded portion of society everywhere inculcate the true doctrine of Life Insurance, that, future benefit is incompatible with *present* dividends—that if the insurer accepts present dividends, his family must forego the future benefit. The premiums on life are calculated for the *future*, and if present as well as prospective benefits are required, other tables must be selected.*

All men of education and reflection should ponder well upon the advantages of Life Insurance, and should promulgate their acquired knowledge throughout the whole circle of their acquaintance. They should remember that it recommends itself in many instances not merely as a measure of expediency, but as a *bonnden* duty—a duty easily discharged by the payment of a moderate sum. The question is, shall the married man trust the comfort of his family to a chance, albeit a promising one, or is he not rather bound to make sure of a provision as far as he can for his wife, his children, his helpless relatives, for all those dependent upon him for support, and, through the medium of Life Insurance, *assure* an adequate provision against impending poverty and irretrievable distress? How many men have I heard say, “Yes, but I want to insure for a large sum *when I*

*At the age of 30, the premium for a hundred dollars to be paid at 40 years of age, or sooner in case of death, is worth \$11.17 per annum; yet, overreaching cupidity would induce some men to believe they can obtain an equal benefit for \$2.36.

do insure, and it is not convenient now," and so, because the man cannot gratify his vanity and pay the life premium on \$10,000 at an expense of two hundred dollars per annum—receive an eighty per cent. scrip dividend and give a promissory note—he dies and leaves his wife and child houseless, sorrow-stricken, and broken-hearted, thrust on the cold kindness of *quasi* charitable relations, without a cent to bury him or provide food for themselves—and this, because he, the loving and devoted husband, would not make even a temporary provision, consonant with his circumstances, for the wife who had been his nurse in sickness, his friend in distress, and whom he had sworn to cherish and protect—and by the payment of twenty or thirty dollars annually for seven years, secure two thousand dollars for her use, provided he should die within that period!

In those solitary hours when woman is left to her own reflections—when the busy and bustling husband is stirring with the world, and floating on the stream of an imaginary prospective affluence—how often does the future present itself to her view, unsalubly as regards herself—but painfully absorbing as regards her offspring! How can she bring the subject to her husband's notice without startling his affection, or in many cases without subjecting herself to a bitter and brutal insinuation? Her delicacy—her affection revolt from the idea of proposing to him the necessity of that which she feels to be his duty, and which he should be the first to suggest. She listens to his tale of future wealth and independence, of speculative thousands, and regrets to think that a paltry sum is withheld, which, under a sudden affliction, might be the saving of herself from destruction, her infant from a bleak and dreary childhood. The husband, if spoken to on the subject, often mistaking his wife's delicacy—his wife's diffidence—his wife's dislike to allude to a period which must bring to her so all-absorbing a loss—will declare that he "*has* spoken on the subject, and *has been* requested never to mention it again." Strange that *man*, who owes to his wife the chief charm of his existence, the every-day comfort of his life, should be able to look heartlessly to that period when their last parting shall take place—when removed to that world where, to him, all is hope and consolation—he shall have wilfully left her in darkness and desolation, steeped in poverty and wretchedness, to struggle with the hard justice of a hard-handed world.

Let woman speak for woman—let each urge the other's claim, and make selfish man comprehend that he has a conscientious course to pursue, a bounden duty to perform, in providing for those who constitute his "*HOME*;" and that, in "*resorting to Life Insurance*, he is risking nothing, but truly securing a certain profit upon that which is at all times an uncertain event."

The general uses of Life Insurance are too numerous to be repeated in this treatise; but the following will be found amongst the most frequent instances where its intervention is required:—It is applicable to the several purposes of raising money on loans, where personal security, only, can be offered;—of making and perfecting marriage settlements;—of securing the eventual payment of doubtful debts, due to individuals or bodies of creditors;—of enabling proprietors of real estate, charged with mortgages, or with portions, or other encumbrances, payable on the termination of their

own or others' lives, to answer the charges when they fall due;—of securing to parents the return of moneys paid as premiums for clerkship or apprenticeship, marriage portions, capital embarked in business, or other advances made for children, in the event of their premature death;—of reimbursing to the purchaser of any life-estate, or annuity, his principal, on the death of the person during whose life it was holden;—of rendering contingent property nearly equal, in point of security, to absolute property;—and, generally, as affording means of certain indemnity against any pecuniary loss, claim, or inconvenience whatsoever, to which one individual may become subject, by reason of the death of another.

When two young persons marry, and that essential ingredient to future enjoyment, *money*, is wanting on both sides—how estimable it would be for them to create a trust fund, and from the earnings of the husband, and by quarterly payments, secure a *small* sum, in the event of his death; limited as their income might be, this provision would always allow them, after deducting the amount of premium (about 2 per cent.), the free use of the remainder. There would be no necessity for a pinching parsimony; there would be none of those evils which sometimes result from a habit of too rigid saving; but the premium once paid, the sum insured (in a good office) would be secured beyond all possibility of risk,* and the husband would look honestly and fearlessly to the varied course of his daily duties, assured that if, in the all-wise dispensations of Providence, any accident should befall him, his home would not be rendered desolate; his property sacrificed, or his family distressed.

The table of the rate of Premiums may be depended upon, as offering to insurers a sound principle of Life Insurance, based upon a proper calculation of the risks to which a Life Insurance Company is always liable. But the Mutual rates do not afford more than a two per cent. dividend per annum at the *end* of five years. I would again remark, the rate of interest of the public funds and mortgages is a settled thing—the “tables of mortality” are a settled thing—the speculator, therefore, has only the third element, “expenses,” to deal with.

The proper method of calculating and distributing these expenses are matters which do not fairly belong to this treatise, and for which I have not space; but in this, as in all cases, I shall be most happy to afford every information and assistance relative to Life Insurance (either verbally or by post), to the officers of distant institutions; to persons desirous of insuring their lives; or to those great public instructors, the NEWSPAPER PRESS; glad if at any time I can do aught to promote the advancement of a science so well adapted to the habits of economy and forethought of the people of this great republic, and at once put a stop to the evils which have arisen by a deviation from those principles of sound mathematical calculation, which are the only basis of LIFE INSURANCE.

* Where an industrious man has accumulated a small sum of money, for the future benefit of his family, by devoting the *interest* of such investment to pay the premiums, he at once attains his object. For example, if he has accumulated \$500, the *interest* of which is \$30 per annum; at 30 years of age, for this \$30 he may assure for whole life \$1388.80, or for a seven years' policy, \$2300; which, added to his own \$500 that he keeps in his own custody, will make a fair provision for his family.

EXPLANATION OF TABLES.

TABLE A.

5251 Individuals, age 37 by the Carlisle Tables, mutually insure each other in the sum of \$100, each paying the annual premium of $\$2\frac{30}{100}$, and making annual dividends of 40 per cent. of the premium.

Insolvency at the commencement—Bankruptcy in the 21st year, and Ruin to all concerned in the thirtieth.

In this table the interest on the *premiums* is calculated at six per cent. for the whole year. The *expenses* are taken at 10 per cent. on the premiums of the current year, with six months' interest added; and the claims on *death* with four months' interest added. The premiums having been credited with the *whole year's* interest, whilst the sums paid for expenses and deaths have been disbursed at intermediate periods, this method of striking an average of interest has been deemed the most honest.

TABLE B.

Showing the Result of an Insurance effected on the Lives of 832 Persons, all aged 30 years—Two per cent. *per annum* to be added to each Policy of \$100 at the Expiration of *every five years*. Premium $\$2\frac{36}{100}$ per \$100.

Objections have been urged against this table that a Two per cent. *per annum* dividend every *five years*, "*is so mean*," that the calculation is useless. Yet, this *two per cent.* was the annual dividend of the always quoted successful London Equitable, and which dividend that office was *obliged* to stop, in 1815, from the majority of policy holders.

TABLE C.

DEDUCTED from the published Statement of Assets of "the PENN MUTUAL," for the years 1848 and 1849, in accordance with the principles of Life Insurance, showing they have no profit, much less 80 per cent. dividend.

The supplementary remarks on this table will be found at pages 15 and 16, showing the result of their present 40 per cent. dividends.

TABLE D.

Table of the Rate of Mortality at Carlisle, commonly known as the Carlisle Tables.

The "Expectation of Life" at page 8 is what "Secretaries"—"Agents"—*Drummers*, and others, imagine to be the Carlisle table, and upon which the cheap premium offices invariably *assume* their calculations. "If a man has a right to *expect* to live so many years, the Table of *expectation* authorizes these offices in assuming *he will live*." By Table D will be seen the number of deaths in each year, which have to be provided for beside the expenses; items *invariably* omitted in the calculations of low premium offices.

TABLE E.

Exhibiting the LAW of MORTALITY AMONGST ASSURED LIVES according to the combined Town and Country Experience of Life Offices, deduced from 62,537 Assurances under the superintendence of a Committee of eminent Actuaries.

TABLE F.

Comparative Expectation of Life; showing the Expectation or Average duration of Life, deduced from Eight Original Tables prepared under the Superintendence of a Committee of eminent Actuaries, and compared with the Carlisle, Equitable, and Northampton Tables.

TABLE G.

Proper Premiums of Insurance of a *Mixed* Company, with a *Paid-up* Capital, on single healthy Lives, for *one* year, for *seven* years, and for whole term of Life, in the sum of \$100.

TABLE A.

5251 Individuals, age 37 by the Carlisle Tables, mutually insure each other in the sum of \$100, each paying the annual premium of \$2⁹⁰/₁₀₀, and making annual dividends of 40 per. cent. of the premiums.

Premiums on 5251 policies, with 6 per cent. interest,		16141 57	6th Year. Funds remaining at the end of the year,		13175 11
Expenses 10 per cent., with six months interest,	1568 47		Interest on above,		790 52
Claims, 57 deaths, with four months interest,	5814		Premiums on 1869 policies with 6 per cent. interest,		14067 31
Dividend 40 per cent., on 5194 policies,	6025 04	13107 51	Expenses 10 per cent., with six months interest,	1454 37	25933 21
1st Year. Funds remaining at the end of the year,		2734 06	Claims, 71 deaths, with four months interest,	7212	
Interest on foregoing,		161 04	Dividend 40 per cent., on 4793 policies,	5565 68	11262 05
Premiums on 5194 policies, with 6 per cent. interest,		15966 46	7th Year. Funds remaining at the end of the year,		11671 19
Expenses 10 per cent., with six months interest,	1551 16	15864 46	Interest on above,		880 27
Claims, 58 deaths, with four months interest,	5916		Premiums on 4793 policies with 6 per cent. interest,		11749 05
Dividend 40 per cent., on 536 policies,	5957 76	13425 21	Expenses 10 per cent., with six months interest,	1433 16	30300 51
2d Year. Funds remaining at the end of the year,		5439 25	Claims, 71 deaths, with four months interest,	7212	
Interest on foregoing,		326 35	Dividend 40 per cent., on 4727 policies,	5153 32	14158 48
Premiums on 5136 policies, with 6 per cent. interest,		15788 06	8th Year. Funds remaining at the end of the year,		16142 03
Expenses 10 per cent., with six months interest,	1534 12	21533 66	Interest on above,		968 52
Claims, 61 deaths, with four months interest,	6222		Premiums on 1727 policies with 6 per cent. interest,		14530 50
Dividend 40 per cent., on 6075 policies,	5887	13643 12	Expenses 10 per cent., with six months interest,	1411 95	31641 35
3d Year. Funds remaining at the end of the year,		7910 54	Claims, 70 deaths, with four months interest,	7140	
Interest on above,		474 63	Dividend 40 per cent., on 4637 policies,	5402 12	13954 07
Premiums on 5075 policies, with 6 per cent. interest,		15600 55	9th Year. Funds remaining at the end of the year,		17687 28
Expenses 10 per cent., with six months interest,	1515 00	23955 72	Interest on above,		1061 24
Claims, 66 deaths, with four months interest,	6732		Premiums on 4657 policies, with 6 per cent. interest,		14315 62
Dividend 40 per cent., on 5009 policies,	5210 44	14053 31	Expenses 10 per cent., with six months interest,	1391 05	33064 11
4th Year. Funds remaining at the end of the year,		9927 39	Claims, 69 deaths, with four months interest,	7038	
Interest on above,		595 64	Dividend 40 per cent., on 4385 policies,	5322 08	13751 13
Premiums on 5009 policies, with 6 per cent. interest,		15347 67	10th Year. Funds remaining at the end of the year,		19313 01
Expenses 10 per cent., with six months interest,	1496 19	25920 69	Interest on above,		1158 78
Claims, 69 deaths, with four months interest,	7038		Premiums on 1583 policies, with 6 per cent. interest,		14103 51
Dividend 40 per cent., on 4940 policies,	5739 40	14261 59	Expenses 10 per cent., with six months interest,	1370 11	31575 30
5th Year. Funds remaining at the end of the year,		11656 10	Claims, 67 deaths, with four months interest,	6831	
Interest on above,		699 37	Dividend 40 per cent., on 4421 policies,	5214 36	13148 80
Premiums on 4910 policies, with 6 per cent. interest,		15185 56	11th Year. Funds remaining at the end of the year,		21126 50
Expenses 10 per cent., with six months interest,	1475 59	27511 03	Interest on above,		1267 59
Claims, 71 deaths, with four months interest,	7212		Premiums on 4521 policies, with 6 per cent. interest,		13997 55
Dividend 40 per cent., on 4969 policies,	5648 04	11365 62			

TABLE A. (Continued.)

5251 Individuals, age 37 by the Carlisle Tables, mutually insure each other in the sum of \$100, each paying the annual premium of \$2⁹⁰/₁₀₀, and making annual dividends of 40 per. cent. of the premiums.

Brought forward,			36191 64	17th Year. Funds remaining at the end of the year,			34978 55
Expenses 10 per cent., with six months interest,	1350 42			Interest on above,			2098 71
Claims, 63 deaths, with four months interest,	6426			Premiums on 4143 policies with 6 per cent. interest,			12735 58
Dividend 40 per cent., on 4458 policies,	5171 28	12947 70					49312 84
12th Year. Funds remaining at the end of the year,		23243 94		Expenses 10 per cent., with six months interest,	1237 51		
Interest on foregoing,		1400 64		Claims, 70 deaths, with four months interest,	7140		
Premiums on 4458 policies, with 6 per cent. interest,		13703 89		Dividend 40 per cent., on 4073 policies,	4724 68	13102 19	
		38348 47		18th Year. Funds remaining at the end of the year,			36710 65
Expenses 10 per cent., with six months interest,	1331 60			Interest on above,			2202 64
Claims, 61 deaths, with four months interest,	6222			Premiums on 4073 policies with 6 per cent. interest,			12520 40
Dividend 40 per cent., on 4397 policies,	5100 52	12654 12					51433 69
13th Year. Funds remaining at the end of the year,		25694 35		Expenses 10 per cent., with six months interest,	1216 60		
Interest on foregoing,		1541 66		Claims, 73 deaths, with four months interest,	7446		
Premiums on 4397 policies, with 6 per cent. interest,		13516 38		Dividend 40 per cent., on 4000 policies,	4640	13302 60	
		40752 30		19th Year. Funds remaining at the end of the year,			38131 09
Expenses 10 per cent., with six months interest,	1313 38			Interest on above,			2387 86
Claims, 59 deaths, with four months interest,	6018			Premiums on 4000 policies with 6 per cent. interest,			12226
Dividend 40 per cent., on 4338 policies,	5032 08	12363 46					52714 95
14th Year. Funds remaining at the end of the year,		28388 93		Expenses 10 per cent., with six months interest,	1194 80		
Interest on above,		1703 33		Claims, 76 deaths, with four months interest,	7752		
Premiums on 4276 policies, with 6 per cent. interest,		13335 01		Dividend 40 per cent., on 3924 policies,	4551 84	13498 64	
		43427 27		20th Year. Funds remaining at the end of the year,			39216 31
Expenses 10 per cent., with six months interest,	1295 76			Interest on above,			2352 98
Claims, 62 deaths, with four months interest,	6324			Premiums on 3924 policies, with 6 per cent. interest,			12062 38
Dividend 40 per cent., on 4276 policies,	4960 16	12579 92					53631 67
15th Year. Funds remaining at the end of the year,		30847 35		Expenses 10 per cent., with six months interest,	1172 10		
Interest on above,		1850 84		Claims, 82 deaths, with four months interest,	8364		
Premiums on 4276 policies, with 6 per cent. interest,		13144 42		Dividend 40 per cent., on 3842 policies,	4456 72	13902 62	
		45842 61		21st Year. Funds remaining at the end of the year,			39638 85
Expenses 10 per cent., with six months interest,	1277 24			Interest on above,			2378 33
Claims, 65 deaths, with four months interest,	6630			Premiums on 3842 policies, with 6 per cent. interest,			11810 31
Dividend 40 per cent., on 4211 policies,	4884 76	12792					53827 19
16th Year. Funds remaining at the end of the year,		33050 61		Expenses 10 per cent., with six months interest,	1147 61		
Interest on above,		1983 01		Claims, 83 deaths, with four months interest,	9486		
Premiums on 4211 policies, with 6 per cent. interest,		12944 61		Dividend 40 per cent., on 3749 policies,	4348 81	14982 45	
		47978 26		22d Year. Funds remaining at the end of the year,			38845 04
Expenses 10 per cent., with six months interest,	1257 83			Interest on above,			2330 70
Claims, 68 deaths, with four months interest,	6936			Premiums on 3749 policies, with 6 per cent. interest,			11524 43
Dividend 40 per cent., on 4143 policies,	4805 88	12999 71					

TABLE A. (Continued.)

5251 Individuals, age 37 by the Carlisle Tables, mutually insure each other in the sum of \$100, each paying the annual premium of \$2⁹⁰/₁₀₀, and making annual dividends of 40 per cent. of the premiums.

Brought forward,		52700 17	27th Year. Funds remaining at the end of the year,		15515 99
Expenses 10 per cent., with six months interest,	1119 83		Interest on above,		930 96
Claims, 106 deaths, with four months interest,	10812		Premiums on 3113 policies with 6 per cent. interest,		9661 58
Dividend 40 per cent., on 3643 policies,	4225 88	16157 71			20108 54
23d Year. Funds remaining at the end of the year,		36542 46	Expenses 10 per cent., with six months interest,	938 81	
Interest on foregoing,		2192 55	Claims, 125 deaths, with four months interest,	12750	
Premiums on 3643 policies, with 6 per cent. interest,		11198 58	Dividend 40 per cent., on 3018 policies,	3500 84	17480 69
		49933 59	22th Year. Funds remaining at the end of the year,		8918 85
Expenses 10 per cent., with six months interest,	1088 16		Interest on above,		535 13
Claims, 122 deaths, with four months interest,	12444		Premiums on 3018 policies with 6 per cent. interest,		9277 33
Dividend 40 per cent., on 3521 policies,	4084 36	17616 52			15731 31
21th Year. Funds remaining at the end of the year,		32317 07	Expenses 10 per cent., with six months interest,	901 48	
Interest on foregoing,		1939 02	Claims, 121 deaths, with four months interest,	12618	
Premiums on 3521 policies, with 6 per cent. interest,		10823 55	Dividend 40 per cent., on 2894 policies,	3357 04	16906 52
		45079 61	29th Year. Funds remaining at the end of the year,		1824 79
Expenses 10 per cent., with six months interest,	1051 72		Interest on above,		109 49
Claims, 126 deaths, with four months interest,	12552		Premiums on 2894 policies with 6 per cent. interest,		8896 16
Dividend 40 per cent., on 3395 policies,	3950 20	17811 92			10830 44
25th Year. Funds remaining at the end of the year,		27237 72	Expenses 10 per cent., with six months interest,	889 62	
Interest on above,		1634 26	Claims, 123 deaths, with four months interest,	12546	13135 62
Premiums on 3395 policies, with 6 per cent. interest,		10136 21	Bankrupt the 30th year with 2771 claims unpaid—they ought at the end of this year to have a clear fund of.		\$458,910 40
		39308 21			
Expenses 10 per cent., with six months interest,	1011 09				
Claims, 127 deaths, with four months interest,	12954				
Dividend 40 per cent., on 3260 policies,	3790 00	17758 97			
26th Year. Funds remaining at the end of the year,		21510 21			
Interest on above,		1292 95			
Premiums on 3260 policies, with 6 per cent. interest,		10045 83			
		32858 02			
Expenses 10 per cent., with six months interest,	976 15				
Claims, 125 deaths, with four months interest,	12750				
Dividend 40 per cent., on 3143 policies,	3615 00	17372 03			

I would have the reader observe that in the 22d year the expenses, claims, and dividends \$14,982 45-100—exceed the interest and premiums \$11,188 61 100, and from that period the Reserve fund \$38,845 04-100 decreases rapidly, and in the 30th year is completely absorbed, leaving more than a half of the original insurers with out a cent. It takes two insurers to pay one claim, on a 10 per cent. dividend.

TABLE B.

Showing the Result of an Insurance Effected on the Lives of 882 Persons, all aged 30 years—Two per cent. PER ANNUM to be added to each Policy of \$100 at the Expiration of EVERY FIVE YEARS. Premium $\$2\frac{36}{100}$ per \$100:

862 premiums at $\$2\frac{36}{100}$ per \$100— $\$2034\frac{32}{100}$ per annum; forborne for 5 years, at 6 per cent. Compound Interest, - - -	11453.22
Age 35, - - 37 deaths, at \$110 per death, - -	4070.00
Balance,	7383.22
Five years Compound Interest,	2436.39
Total,	9819.61
825 premiums at $\$2\frac{36}{100}$ per \$100—\$1947 per annum; forborne 5 years, at 6 per cent, Compound Interest, - - -	10961.61
Balance and five years Compound Interest,	20781.21
Age 40, - - 39 deaths, at \$121 per death, - - -	4719.00
Balance,	16062.21
Five years Compound Interest,	5300.46
	21362.67
786 premiums, - - - $\$1854\frac{96}{100}$ five years Compound Interest,	10443.42
Total,	31806.09
Age 45, - - 42 deaths, at \$133 per death, - - -	5540.00
Balance,	26266.09
Five years Compound Interest,	8667.80
	34933.89
744 premiums, - - - $\$1755\frac{84}{100}$ five years Compound Interest,	9885.37
Total,	44819.26
Age 50, - - 49 deaths, at \$146 per death, - - -	7154.00
Balance,	37665.26
Five years Compound Interest,	12428.42
	40093.68
695 premiums, - - - \$1639.20 - - - - - - - - -	9228.69
Total,	49322.37
Age 55, - - 61 deaths, at 160 per death, - - -	9760.00
Balance,	39562.37
Five years Compound Interest,	13055.58
	52617.95
634 premiums, - - - \$1495.24 - - - - - - - - -	8418.25
Total,	61036.20
Age 60, - - 75 deaths, at 176 per death, - - -	13200.00
Balance,	47836.20
Five years Compound Interest,	15785.94
	63622.16
559 premiums, - - - \$1319 - - - - - - - - -	7426.30
Total,	71048.46
Age 65, - - 92 deaths, at \$193 per death, - - -	17756.00
Balance,	53292.46
Deduct 5 per cent. for expenses for 35 years,	13786.47
	\$39505.99

TABLE B.

Showing what would be the result of a Two per cent. Dividend—all the Lives becoming extinct in the due course of nature.

Number of Policies at commencement,	.	-	-	862
Deaths,	-	-	-	395
Remain,	-	-	-	467
Average amount left for each policy,	-	-	-	\$81 ⁶⁰ / ₁₀₀ 39505.99
Five years Compound Interest,				13036.97
				52542.96
467 premiums annually, \$1102. five years Compound Interest,	-	-		6204.98
			Total,	58747.89
Age 70 years; 109 deaths, 212 per death,	-	-	-	23108.00
			Balance,	35639.89
			Five years Compound Interest,	11761.16
				47401.05
358 premiums annually, \$84 ⁸⁸ / ₁₀₀ five years Compound Interest,	-			4756.67
			Total,	52157.72
Age 75 years; 117 deaths, \$232 per death,	-	-	-	27261.00
			Balance,	24896.72
			Five years Compound Interest,	8215.91
				33112.63
241 premiums annually, \$568.76 five years at Compound Interest,	-			3202.10
			Total,	36314.73
Age 80 years; 109 deaths, at \$256 per death,	-	-	-	27904.00
			Balance,	8410.73
			Five years Compound Interest,	2775.54
				11186.27
132 premiums annually, \$211 ⁵² / ₁₀₀ five years at Compound Interest,	-			1753.85
			Total Cash,	12940.12
Claim age 85 years; 78 deaths, at \$281 per death, (no assets)				21918.00
BANKRUPTCY AND DEFICIENCY, on above, 78 deaths,	-	-		\$8978.12
DEFICIENCY at 90 years of age, 41 deaths, 309 per death,	-			12969.00
Do. at 95 " " 12 deaths, 339 per death,	-			4068.00
Do. at 100 " " 1 death, 373 per death,	-			373.00
Thirty-five years' expenses as before,				13036.00
			TOTAL DEFICIENCY,	*\$39124.02

*Thirty cents extra, or \$2.68 per \$100, at the commencement, would have saved the Company. If the policies were for \$5000 each, and the number of policies were 5200, the total Deficiency would be ELEVEN MILLIONS EIGHT HUNDRED AND TWENTY-SEVEN THOUSAND TWO HUNDRED DOLLARS!!!

TABLE C.

DEDUCED from the published Statement of Assets of "the PENN," for the years 1848 and 1849, in accordance with the principles of Life Insurance, showing they have no profit, much less 80 per cent. dividend.

1848.

Policies, 380; Receipts, \$40000; Average Age, 43; Average Premium,	
\$3 ⁵⁰ / ₁₀₀ per \$100,	
Amount (averaged as) assured, \$1,153,857	
Premiums, per statement,	\$40,000
(Average) amount of Policies, \$3000,	
(No. 1) 55 per cent for Deterioration of Life,	\$24000
Average Deaths, 4 by Tables of Mortality,	12000
Expenses per statement,	7300—\$43,300
Deficiency,	\$3300

1849.

Old Policies, 380
New Policies, 540

920; Receipts, \$70,000; Average age, 43; Average premium, \$3.50 per \$100.	
Amount (averaged as) assured, \$2,000,000	
Premiums, per statement,	\$70,000
Average amount of Policies, \$2174,	
(No. 2) 55 per cent for Deterioration of Life,	\$38500
9 Deaths, by Tables of Mortality,	19566
Deficiency in 1848,	3300
Expenses, per statement,	11277—\$72,643
Deficiency,	\$2643.
(No. 1) 1848. 55 per cent. Protection Fund, \$24000	
(No. 2) 1849. 55 per cent. Protection Fund, \$38500	
Total to be invested,	\$62,500
Interest required for increase of Premiums on \$62,500, at 5½ per cent. per annum,	\$3427.00
Difference of Prem. between age of 43 and 44 on \$856,143—\$943.87	
Do. Do. Do. 43 and 45 on \$1,143,858—2516.36	\$3460.23
Average amount of Deaths by Tables, and } Average of Policies—	Deficiency, \$33.23
1848 year—4 deaths; \$3000 each, \$12000,	
1849 year—9 deaths; \$2174 each, \$19566—\$31566	
Deaths by Statement,	21000
Loss, which will be chargeable } against prems. of 1849 in 1850 }	\$10566
(No. 1 & 2) 55 per cent. Protection, as above	\$62500
Deficiency of 1849,	2643
	\$75709
Loss and Protected Fund,	\$76,437
	75,709
Balance,	728

* The above shows the affairs of this Company to be in a fair state, with a promise of a prosperous future; but to attain that, they must retrace their steps, and abandon the 80 per cent. dividend and note payments, which, it is true, have not done much injury for the present, but if persisted in will be extremely injurious.

TABLE D.

TABLE OF THE RATE OF MORTALITY AT CARLISLE.

COMMONLY KNOWN AS THE CARLISLE TABLES.

Age.	Number alive in each year.	Deaths in that year.	Age.	Number alive in each year.	Deaths in that year.	Age.	Number alive in each year.	Deaths in that year.
0	10000	1539	35	5362	55	70	2401	124
1	8461	682	36	5307	56	71	2277	134
2	7779	505	37	5251	57	72	2143	146
3	7274	276	38	5194	58	73	1997	156
4	6998	201	39	5136	61	74	1841	166
5	6797	121	40	5075	66	75	1675	160
6	6676	82	41	5009	69	76	1515	156
7	6594	58	42	4940	71	77	1359	146
8	6536	43	43	4869	71	78	1213	132
9	6493	33	44	4798	71	79	1081	128
10	6460	29	45	4727	70	80	953	116
11	6431	31	46	4657	69	81	837	112
12	6400	32	47	4588	67	82	725	102
13	6368	33	48	4521	63	83	623	94
14	6335	35	49	4458	61	84	529	84
15	6300	39	50	4397	59	85	445	78
16	6261	42	51	4338	62	86	367	71
17	6219	43	52	4276	65	87	296	64
18	6176	43	53	4211	68	88	232	51
19	6133	43	54	4143	70	89	181	39
20	6090	43	55	4073	73	90	142	37
21	6047	42	56	4000	76	91	105	30
22	6005	42	57	3924	82	92	75	21
23	5963	42	58	3842	93	93	54	14
24	5921	42	59	3749	106	94	40	10
25	5879	43	60	3643	122	95	30	7
26	5836	43	61	3521	126	96	23	5
27	5793	45	62	3395	127	97	18	4
28	5748	50	63	3268	125	98	14	3
29	5698	56	64	3143	125	99	11	2
30	5642	57	65	3018	124	100	9	2
31	5585	57	66	2894	123	101	7	2
32	5528	56	67	2771	123	102	5	2
33	5472	55	68	2648	123	103	3	2
43	5417	55	69	2525	124	104	1	1

TABLE E.

NEW RATE OF MORTALITY.

Exhibiting the LAW of MORTALITY AMONGST ASSURED LIVES according to the combined Town and Country Experience of Life Offices, deduced from 62,537 Assurances under the superintendence of a Committee of eminent Actuaries.*

Completed Age.	Number Surviving at each Age.	Deaths in each Year.	Logarithm of Number surviving at each Age.	Completed Age.	Number Surviving at each Age.	Deaths in each Year.	Logarithm of Number surviving at each Age.
10	100000	676	5.0000000	55	63469	1375	4.8025617
11	99324	674	4.9970542	56	62094	1436	4.7930496
12	98650	672	4.9940971	57	60658	1497	4.7828881
13	97978	671	4.9911286	58	59161	1561	4.7720355
14	97307	671	4.9881441	59	57600	1627	4.7604225
15	96636	671	4.9851389	60	55973	1698	4.7479786
16	95965	672	4.9821129	61	54275	1770	4.7345998
17	95293	673	4.9790610	62	52505	1844	4.7202007
18	94620	675	4.9759829	63	50661	1917	4.7046738
19	93945	677	4.9728737	64	48744	1990	4.6879212
20	93268	680	4.9697327	65	46754	2061	4.6698188
21	92588	683	4.9665547	66	44693	2128	4.6502395
22	91905	686	4.9633391	67	42565	2191	4.6290526
23	91219	690	4.9600853	68	40374	2246	4.6061018
24	90529	694	4.9567877	69	38128	2291	4.5812440
25	89835	698	4.9534456	70	35837	2327	4.5543316
26	89137	703	4.9500580	71	33510	2351	4.5251744
27	88434	708	4.9466193	72	31159	2362	4.4935835
28	87726	714	4.9431283	73	28797	2358	4.4593472
29	87012	720	4.9395792	74	26439	2339	4.4222450
30	86292	727	4.9359705	75	24100	2303	4.3820170
31	85565	734	4.9322962	76	21797	2249	4.3383967
32	84831	742	4.9285546	77	19548	2179	4.2911023
33	84089	750	4.9247392	78	17369	2092	4.2397748
34	83339	758	4.9208483	79	15277	1987	4.1840381
35	82581	767	4.9168801	80	13290	1866	4.1235250
36	81814	776	4.9128276	81	11424	1730	4.0578182
37	81038	785	4.9086887	82	9694	1582	3.9865030
38	80253	795	4.9044613	83	8112	1427	3.9091279
39	79458	805	4.9001376	84	6685	1268	3.8251014
40	78653	815	4.8957153	85	5417	1111	3.7337588
41	77838	826	4.8911917	86	4306	958	3.6340740
42	77012	839	4.8865584	87	3348	811	3.5247854
43	76173	857	4.8818011	88	2537	673	3.4043205
44	75316	881	4.8768872	89	1864	545	3.2704459
45	74435	909	4.8717772	90	1319	427	3.1202448
46	73526	944	4.8664409	91	892	322	2.9503649
47	72582	981	4.8603289	92	570	231	2.7558749
48	71601	1021	4.8549191	93	339	155	2.5301997
49	70580	1063	4.8486817	94	184	95	2.2648178
50	69517	1108	4.8420910	95	89	52	1.9493900
51	68409	1156	4.8351132	96	37	24	1.5682017
52	67253	1207	4.8277117	97	13	9	1.1139434
53	66046	1261	4.8193465	98	4	3	0.6020600
54	64785	1316	4.8114745	99	1	1	0.0000000

* Messrs. Charles Ansell of the "Atlas," Griffith Davies of the "Guardian," J. J. Downs of the "Economic," Benjamin Gompertz of the "Alliance," George Kirkpatrick of the "Law Life," Joshua Milne of the "Sun," J. M. Rainbow of the "Crown," W. S. B. Wolhouse of the "National Loan Fund," and Samuel Ingall, of the "Imperial," Secretary to the Committee.

TABLE F.

COMPARATIVE EXPECTATIONS OF LIFE.

Showing the Expectation or Average duration of Life, deduced from Eight Original Tables prepared under the Superintendence of a Committee of eminent Actuaries, and compared with the Carlisle, Equitable, and Northampton Tables.

Completed Age.	Male Lives—Town, Country and Irish Experience.	Female Lives—Town, Country and Irish Experience.	Town Experience.	Country Experience.	Irish Experience.	Combined Town Experience.	General Experience.	Adjusted Experience.	Carlisle Experience.	Equitable Experience.	Northampton Experience.	Completed Age.
20	39.84	35.86	41.22	40.33	31.93	41.55	40.97	41.49	41.46	41.06	31.43	20
21	39.29	36.01	40.68	40.29	31.48	40.96	40.45	40.79	40.75	40.33	32.90	21
22	38.70	36.20	40.47	39.89	33.18	40.38	39.92	40.09	40.01	39.60	32.39	22
23	38.98	35.41	39.77	38.78	32.78	39.65	39.18	39.39	39.31	38.88	31.88	23
24	37.41	34.51	39.23	38.37	32.64	38.98	38.54	38.68	38.59	38.16	31.36	24
25	36.63	34.41	38.56	37.55	31.94	38.26	37.81	37.98	37.86	37.44	30.85	25
26	35.88	33.79	37.72	36.88	31.05	37.54	37.13	37.27	37.11	36.73	30.33	26
27	35.24	33.14	37.10	36.12	30.99	36.81	36.42	36.56	36.41	36.02	29.82	27
28	34.63	33.07	36.45	35.64	30.76	36.12	35.76	35.86	35.69	35.33	29.30	28
29	33.96	32.61	35.67	34.91	30.56	35.48	35.06	35.15	35.00	34.65	28.79	29
30	33.17	31.73	34.81	34.20	29.71	34.54	34.25	34.43	34.31	33.98	28.27	30
31	32.44	31.04	34.17	33.51	29.08	34.78	34.50	33.72	33.68	33.30	27.76	31
32	31.73	30.51	33.31	32.86	28.36	33.01	32.75	33.01	33.03	32.61	27.21	32
33	30.92	29.86	32.53	32.05	27.63	32.22	31.98	32.30	32.36	31.98	26.72	33
34	30.21	29.60	31.77	31.41	26.85	31.51	31.27	31.58	31.68	31.32	26.20	34
35	29.52	29.07	31.12	30.78	26.30	30.77	30.55	30.87	31.00	30.66	25.68	35
36	28.87	28.88	30.44	30.20	25.77	30.08	29.90	30.15	30.32	30.01	25.16	36
37	28.15	28.30	29.63	29.15	25.26	29.37	29.20	29.41	29.61	29.35	24.61	37
38	27.49	27.62	29.00	28.51	24.61	28.65	28.51	28.72	28.96	28.70	24.12	38
39	26.81	27.00	28.31	27.82	23.93	27.92	27.79	28.00	28.28	28.05	23.60	39
40	26.00	26.36	27.53	27.38	23.36	27.50	27.07	27.28	27.61	27.40	23.08	40
41	25.42	25.84	26.85	26.73	22.86	26.51	26.41	26.56	26.97	26.71	22.56	41
42	24.70	25.34	26.19	26.01	22.14	25.79	25.68	25.84	26.31	26.07	22.01	42
43	24.00	24.57	25.47	25.22	21.56	25.07	24.98	25.12	25.71	25.40	21.54	43
44	23.34	23.94	24.77	24.52	21.00	24.32	24.26	24.40	25.09	24.75	21.03	44
45	22.63	23.21	24.08	23.83	20.30	23.61	23.55	23.69	24.46	24.10	20.52	45
46	21.98	22.60	23.42	23.13	19.76	22.90	22.85	22.97	23.82	23.44	20.02	46
47	21.31	21.97	22.70	22.31	19.12	22.15	22.12	22.27	23.17	22.78	19.51	47
48	20.62	21.16	22.01	21.67	18.59	21.44	21.41	21.56	22.50	22.12	19.00	48
49	20.09	20.69	21.31	21.13	18.37	20.77	20.79	20.87	21.81	21.47	18.49	49
50	19.41	20.05	20.58	20.18	17.76	20.07	20.11	20.18	21.11	20.83	17.99	50
51	18.73	19.16	19.89	19.73	17.20	19.41	19.45	19.50	20.39	20.20	17.50	51
52	18.05	18.80	19.17	19.03	16.62	18.75	18.79	18.82	19.68	19.59	17.02	52
53	17.40	18.31	18.52	18.30	16.11	18.11	18.16	18.16	19.07	19.00	16.51	53
54	16.77	17.58	17.95	17.55	15.51	17.46	17.50	17.50	18.25	18.13	16.06	54
55	16.21	16.78	17.25	16.96	15.01	16.76	16.83	16.86	17.58	17.45	15.58	55
56	15.66	16.07	16.71	16.40	14.41	16.17	16.23	16.22	16.89	16.78	15.10	56
57	15.09	15.39	16.04	15.67	13.85	15.56	15.62	15.59	16.21	16.71	14.63	57
58	14.45	14.79	15.35	15.21	13.31	14.90	14.98	14.97	15.55	16.15	14.15	58
59	13.92	14.24	14.86	14.60	13.01	14.25	14.38	14.37	14.92	15.60	13.68	59
60	13.47	13.78	14.23	14.03	12.67	13.68	13.81	13.77	14.34	15.06	13.21	60
61	12.99	13.10	13.58	13.50	12.29	13.08	13.24	13.18	13.82	14.51	12.75	61
62	12.46	12.41	13.01	12.87	11.81	12.52	12.68	12.61	13.31	13.96	12.28	62
63	11.90	11.87	12.45	12.26	11.15	11.91	12.09	12.05	12.71	13.12	11.81	63
64	11.27	11.09	11.62	11.75	10.67	11.32	11.50	11.51	12.39	12.88	11.35	64
65	10.57	10.60	11.18	11.11	10.19	10.86	11.03	10.97	11.79	12.35	10.88	65
66	10.38	10.60	10.69	10.82	9.71	10.37	10.51	10.46	11.27	11.83	10.12	66
67	9.93	9.56	10.11	10.26	9.14	9.87	10.03	9.96	10.75	11.32	9.96	67
68	9.33	8.85	9.57	9.72	8.73	9.31	9.46	9.47	10.21	10.82	9.56	68
69	8.81	8.38	9.29	8.91	8.27	8.88	8.99	9.00	9.70	10.32	9.05	69
70	8.31	7.93	8.61	8.48	7.92	8.41	8.50	8.51	9.12	9.81	8.60	70
71	7.88	7.31	8.33	7.92	7.37	8.10	8.18	8.16	8.65	9.36	8.17	71
72	7.41	6.83	7.65	7.37	6.98	7.69	7.72	7.67	8.16	8.88	7.71	72
73	6.97	6.19	7.08	6.76	6.70	7.22	7.23	7.23	7.72	8.42	7.31	73
74	6.57	5.72	6.53	6.31	6.37	6.79	6.81	6.86	7.31	7.97	6.92	74
75	6.03	5.37	6.29	5.55	5.97	6.45	6.46	6.48	7.01	7.52	6.51	75
76	5.63	5.15	6.31	5.45	5.31	6.10	6.08	6.11	6.64	7.08	6.18	76
77	5.48	4.78	5.52	4.90	5.39	5.71	5.77	5.76	6.40	6.64	5.83	77
78	5.16	4.56	5.19	4.69	5.23	5.32	5.37	5.42	6.12	6.29	5.48	78
79	4.99	4.80	5.32	4.91	4.90	5.05	5.07	5.09	5.80	5.78	5.11	79
80	4.73	4.75	4.75	4.75	4.75	4.75	4.75	4.75	5.51	5.39	4.75	80

TABLE G.

Proper Premiums of Insurance of a MIXED Company, with a PAID-UP Capital, on single healthy Lives, for one year, for seven years, and for whole term of Life, in the sum of \$100.

WITHOUT PROFITS.				WITH PROFITS WHOLE TERM.	WITHOUT PROFITS.				WITH PROFITS WHOLE TERM.
Age.	Premiums for the term of one year.	Annual Premiums for the term of 7 yrs.	Annual Premiums for life.		Age.	Premiums for the term of one year.	Annual Premiums for the term of 7 yrs.	Annual Premiums for life.	
14	\$ 71	\$ 83	\$1 37	\$1 53	38	\$1 48	\$1 68	\$2 76	\$3 01
15	78	86	1 41	1 57	39	1 56	1 75	2 86	3 11
16	83	88	1 45	1 61	40	1 66	1 81	2 95	3 21
17	87	89	1 48	1 65	41	1 77	1 84	3 05	3 31
18	88	89	1 52	1 69	42	1 84	1 86	3 15	3 41
19	89	90	1 56	1 73	43	1 85	1 87	3 24	3 52
20	90	91	1 60	1 78	44	1 86	1 88	3 35	3 63
21	91	92	1 64	1 83	45	1 87	1 89	3 46	3 75
22	92	94	1 69	1 88	46	1 88	1 90	3 59	3 88
23	95	99	1 74	1 93	47	1 89	1 91	3 72	4 02
24	98	1 04	1 79	1 99	48	1 92	1 93	3 87	4 17
25	1 01	1 09	1 85	2 05	49	1 94	1 96	4 04	4 35
26	1 09	1 15	1 91	2 11	50	1 97	2 03	4 24	4 54
27	1 14	1 20	1 97	2 17	51	1 98	2 15	4 43	4 76
28	1 21	1 25	2 04	2 23	52	2 00	2 32	4 66	4 99
29	1 27	1 28	2 10	2 30	53	2 08	2 54	4 87	5 24
30	1 30	1 31	2 16	2 37	54	2 18	2 82	5 13	5 50
31	1 31	1 35	2 22	2 43	55	2 31	3 14	5 39	5 78
32	1 32	1 39	2 28	2 50	56	2 45	3 48	5 66	6 09
33	1 33	1 42	2 34	2 57	57	2 70	3 84	5 98	6 42
34	1 34	1 45	2 42	2 65	58	3 11	4 20	6 29	6 77
35	1 36	1 48	2 50	2 73	59	3 64	4 53	6 60	7 12
36	1 39	1 53	2 58	2 82	60	4 31	4 80	6 94	7 47
37	1 42	1 60	2 67	2 91					

EXAMPLE.—A person 25 years old next birthday may for the sum of \$10.10 insure his life for \$1000 for *one year*, or the same sum (\$1000) may be insured for *seven years* by the annual payment of \$10.90. Or \$18.50 paid annually till death, will secure the payment of \$1000, whenever that event may happen.

Persons insuring under the "MUTUAL" rates, participate in the profits of the business of the Institution. But the stability and prosperity of an office depend in a great measure upon the annual increase in the number of insurers and the amount of new premiums, as it must be evident, where such an increase cannot be obtained, the expenses must eat into the income of the old business.

AN ACCOUNT
OF ALL THE OFFICES ESTABLISHED FOR
LIFE INSURANCE
IN THE
UNITED STATES.

EXHIBITING THE ADVANTAGES THEY RESPECTIVELY OFFER TO THE PUBLIC;
CHIEFLY EXTRACTED* FROM THEIR OWN ADVERTISEMENTS AND FINANCIAL
PRINTED STATEMENTS.—TOGETHER WITH TABLES OF THE RATE OF
PREMIUM CHARGED BY EACH,
SHORT TERMS—JOINT-STOCK—MUTUAL.

* A circular was addressed, early in May, to every Life Insurance Company in the Union, intimating the intention to publish, in this edition, a brief account of all the offices throughout the States. Where an office has not furnished a statement, the Author has given it, on the authority of their prospectus, &c., and after a full investigation of their proceedings and financial condition.

ÆTNA LIFE INSURANCE COMPANY.

PROPRIETARY.

PAID CAPITAL, \$150,000.—HARTFORD. CONNECTICUT.

Incorporated, 1850.

THOMAS K. BRACE, Pres't.

S. L. LOOMIS, Sec'y.

Low premiums, and payment of policies guaranteed by a large paid up capital, altogether separate from the fire department, and secured to the insurers. The policy of this office is to require a definite premium, subject to no future contingencies, and to pay to the assured such fixed and certain amount as the circumstances of the party in his own judgment require.

ALBION.

PROPRIETARY COMPANY.

CAPITAL, \$5,000,000.—42, NEW BRIDGE STREET, BLACKFRIARS.

Established, A. D. 1805.—Empowered by Act of Parliament.

Assurances effected at reduced rates.

Policies effected on their own lives, and legally assigned to others, not invalidated in case of death by suicide, duelling, or the hands of justice.

Claims payable in thirty days after sufficient proof of death.

Agent—R. S. BUCHANAN, Wall Street, New York.

AMERICAN LIFE AND HEALTH.

CAPITAL, \$500,000.—OFFICE, No. 70, SOUTH THIRD ST., PHILA.

Established, A. D. 1850.

LEONARD JEWELL, Pres't.

JOHN C. SIMS, Sec'y and Actuary.

A number of gentlemen of this city, anxious to revive and perpetuate a proper interest in a great moral reform, conceived the idea of holding up the important truth that total abstinence from all that intoxicates is a sure means of preserving health and lengthening life. This truth naturally suggested that, as total abstinence lives are of longer duration, they can be insured at lower rates than others. To render this fact practically useful, they applied for, and obtained from the Legislature, a highly favourable act incorporating this company. Its rates of insurance present a new and strong inducement to a life of entire temperance. They are so low that the savings, by the disuse of intoxicating beverages, even by those who use them moderately, will be sufficient to pay for an insurance on a large sum of money. The condition required by the company for the low rates of insurance, is total abstinence (except when prescribed by a physician, in cases of actual sickness) from all that intoxicates, under a forfeiture of the policy; and when this is considered on one side, and motives of health and economy on the other, it will probably rarely be broken. Those, however, who do not wish to put themselves under this restraint, may be insured by this company on the usual conditions, at lower rates than by most other companies.

AMERICAN MUTUAL LIFE INSURANCE COMPANY. ✕

NEW HAVEN, CONNECTICUT.

Chartered, 1847.

BENJAMIN SILLIMAN, Pres't.

BENJAMIN NOYES, Sec'y.

This company was started with the intent of selling cheaper than other companies; and, without any fixed principle, or any calculation, they "reduced their premiums twenty-five per cent. below the usual charge." This has not left a sufficient sum over the "TRUE PREMIUM," for expenses and profit and loss. The plans and movements of this company are such as to render a notice of but little consequence.

BALTIMORE LIFE.

PROPRIETARY.

CAPITAL, \$200,000.—BALTIMORE.

Chartered, 1830.

JOHN J. DONALDSON, Pres't.

RICHARD B. DORSEY, Sec'y.

Insurance on lives.

Purchase and sale of annuities.

Receiving endowments.

The company insure lives at rates as low as safety to the assured and the company will justify; thus the assured enjoys the benefit of an *immediate* in lieu of a *prospective* and *uncertain* bonus.

Married women can insure the lives of their husbands, for their own use, free from the claims of the representatives of their husbands, or any of their creditors.

Information may be obtained on application to the company.

BRITISH COMMERCIAL.

MIXED COMPANY.

CAPITAL, \$3,000,000.—35, CORNHILL.

Empowered by Act of Parliament.—Established, A. D. 1820.

Tables exhibiting the rates required to assure a fixed amount at the lowest scale of premium; also the rates for participating in the profits.

Persons assured upon the higher scale entitled to receive their share of three-fourths of the gains arising from assurances of that class.

Agent—JOHN ROBINSON, 3 Montgomery Street, Jersey City, N. J.

Actuary for the Southern States—H. G. HEARTT, 38 Camp Street, New Orleans.

CHARTER OAK LIFE INSURANCE COMPANY.

MIXED.

CAPITAL, \$200,000.—HARTFORD, CONNECTICUT.

Incorporated, 1850.

GIDEON WELLES, Pres't.

SAMUEL COIT, Sec'y.

Promise to give scrip certificates of profits, payable in cash after *two hundred thousand dollars* have accumulated as a reserve mutual fund. Such scrip BEARING INTEREST FROM DATE, AND TRANSFERABLE.

The ruinous consequences of this description of scrip in life insurance ought now to be sufficiently clear to young offices. If not to them, it is to insurers.

CONNECTICUT MUTUAL LIFE INSURANCE COMPANY.

HARTFORD, CONNECTICUT.

Chartered, 1846.

JAMES GOODWIN, Pres't.

GUY R. PHELPS, Sec'y.

The liabilities of this company exceed twenty-two millions of dollars, with a reserve fund of only two hundred and fifty thousand dollars. They have made five annual dividends (not paid) of 80-60-60-50-50 per cent. of the premiums. So that those who live longest and pay most will receive least. When any agent of this company solicits a party to insure, it would be prudent to make on the face of the application a note of all the benefits promised; as the most reckless and unprincipled engagements are made by persons connected with this office, to which circumstance chiefly is to be attributed the amount of business they have transacted.

EAGLE.

MIXED COMPANY.

3, CRESCENT, NEW BRIDGE STREET.

Empowered by Act of Parliament.—Established, A. D. 1807.

Distinct and reduced rates of premium for the assurance of female life.
Increasing rates of premium.

Agent—JNO. S. BARTLETT, 86 William Street, New York.

EAGLE LIFE AND HEALTH INSURANCE COMPANY.

JERSEY CITY, NEW JERSEY.

Chartered, 1847.

JAS. M. CHAPMAN, Pres't. RICHARD H. BULL, Sec'y and Actuary.

The principles laid down in the *Prospectus* of this company are correct, but their business has been extremely limited.

EQUITABLE MUTUAL LIFE INSURANCE COMPANY.

74 WALNUT STREET, PHILADELPHIA.—Chartered, 1848.

PETER CULLEN, Pres't.

Sec'y.

Ten dollars have been paid up per share on a limited portion of the stock, to which a dividend, in June, 1850, was added, of two and a half dollars per share, making twelve dollars and a half credited upon each share. The market value of this stock, at public auction, is only *three dollars and a quarter*: a tolerably strong evidence of the want of confidence felt by the public in any investment in this office. (See page 22-23.)

HARTFORD LIFE AND HEALTH INSURANCE COMPANY.

HARTFORD, CONNECTICUT.—Chartered, 1849.

JAMES DIXON, Pres't.

HENRY L. MILLER, Sec'y.

This company have made a wholesale deduction of thirty-three and a third per cent. for persons assuring on the joint-stock rates. This reduction makes their rates—*without any deduction for commission, usually ten per cent., and expenses of office, five per cent.*: just one and a half per cent. below the TRUE PREMIUM, or prime cost. The prospects of this company may be classed, therefore, with that of persons generally who promise to pay more than they can receive.

HOPE MUTUAL LIFE INSURANCE COMPANY.

STAMFORD, CONNECTICUT.—Chartered, 1847.

JOHN W. LEEDS, Pres't.

ROSSELL HOYT, Sec'y.

There is a vitality in corporations which allows them to be resuscitated even in *extremis*. In this case, however, we believe there is no Hope.

JEFFERSON LIFE INSURANCE COMPANY.

CAPITAL, \$100,000 PAID.—CINCINNATI, OHIO.—Chartered, 1850.

H. H. GOODMAN, Pres't.

L. BENTON, Sec'y.

This company insure upon the mutual as well as upon the joint-stock plan. The rates of premium upon the joint-stock plan are materially reduced. On the mutual plan, but one-half the premium is required in cash. Married women, by the charter of this company, may insure the lives of their husbands for their sole use in their own names, without the power of creditors or representatives of the husband to interfere. They grant or purchase annuities, invest trust funds, and confer endowments.

KEYSTONE MUTUAL LIFE INSURANCE COMPANY.

HARRISBURG, PENNSYLVANIA.—Chartered, 1850.

LUTHER REILY, Pres't.

JOHN W. WILSON, Sec'y.

The business of this company, which has rates for insuring against accidents by railroad or steamboat, is extremely limited.

KENTUCKY MUTUAL LIFE INSURANCE COMPANY.

COVINGTON, KENTUCKY.—Chartered, 1850.

W. B. ROBBINS, Pres't.

J. R. PAYSON,

Covington is an inconsiderable town in Kentucky, and this company established with a view to transact business through distant agencies. the scheme will be successful remains to be proved.

+ GIRARD LIFE INSURANCE, ANNUITY, AND TRUST COMPANY OF PHILADELPHIA.

CAPITAL \$300,000 PAID UP.—OFFICE No. 132 CHESTNUT STREET, FIRST DOOR
EAST OF UNITED STATES CUSTOM HOUSE.

Established in 1836.—Charter Perpetual.

B. W. RICHARDS, Pres't.

JOHN F. JAMES, Actuary.

Make insurances on lives; grant annuities and endowments; receive and execute trusts, and receive deposits on interest.

Besides the paid-up capital, they have a large and constantly increasing reserved fund; together affording undoubted security to the insured. The travelling privileges are liberal and extensive. The premiums may be paid yearly, half-yearly, or quarterly.

After a proper *periodical investigation*, the company declare a BONUS to the insurances for life. Two bonuses have been declared, one in 1844, the other in 1840, making additions to the sums insured equal to 60 per cent. on the premiums paid—without requiring any increase of the annual premium.

The following are a few examples of the earlier policies:

POLICY.	Sum originally Insured.	Bonuses or Additions.	Amount of policy and bonuses payable at the decease of the party—to be increased by future additions.
No. 58,	\$1000	\$262.50	\$1262.50
No. 89,	2500	656.25	3156.25
No. 276,	2000	475.00	2475.00
No. 333,	5000	1187.50	6187.50
&c.	&c.	&c.	&c.

Prompt payment of losses has always characterized the company.

MUTUAL LIFE INSURANCE COMPANY OF BALTIMORE.

BALTIMORE, MARYLAND.

Chartered, 1845.

This company, from want of success, has been obliged this year to assign over all its policies to a company at the eastward; it may therefore be considered as *deceased*.

+ MUTUAL LIFE INSURANCE COMPANY OF NEW YORK.

35 WALL STREET, NEW YORK.

Chartered, 1843.

JOSEPH B. COLLINS, Pres't.

CHARLES GILL, Actuary.

J. ABBOTT, Sec'y.

MANHATTAN LIFE INSURANCE COMPANY.

MIXED.

CAPITAL, \$100,000.—PAID UP, \$100,000.—108 BROADWAY, NEW YORK.
Chartered 1850.

A. A. ALVORD, Pres't.

C. Y. WEMPLE, Sec'y.

The company has only this year commenced business. And although it has a *bonâ fide* cash capital of \$100,000, the whole of the sum is hypothecated for ever for the exclusive benefit of the insured residing in the State of New York, and is therefore no security to persons who reside in other States. The law of 1851 has given New York creditors such a preference in the payment of their claims, that residents of other States require to be very cautious how they insure with new companies.

MUTUAL BENEFIT LIFE AND FIRE INSURANCE COMPANY.

STATE OF LOUISIANA.—38 CAMP STREET, NEW ORLEANS.

JOHN HAGAN, Pres't.

EDW. JENNER COXE, Vice Pres't.

H. G. HEARTT, Actuary.

E. F. JENKINS, Accountant.

Incorporated 1849.

PERMANENT FUND, \$200,000.

This was the first Mutual Office ever established in Louisiana. The rates are the same as New York and Pennsylvania offices; but, unacclimated persons are charged one per cent. per annum extra. Its scrip is issued annually for dividends, but not paid out, but kept as a reserve fund; neither the principal or interest is payable until the accumulated fund is entire.

The company has been prosperous, and as there is no State law in Louisiana similar to New York giving preference to citizens of New York over other States, it is a desirable company for the South. It is well conducted.

MUTUAL BENEFIT LIFE INSURANCE COMPANY.

NEWARK, NEW JERSEY.

Chartered, 1816.

ROBERT L. PATTERSON, Pres't.

BENJ. C. MILLER, Sec'y.

This company was started upon the principle of taking twenty-five per cent. in cash and seventy-five per cent. of the premium in a note. All expenses being paid necessarily in cash, this method was found not to answer, and of late they have required 50 per cent. cash, 50 per cent. note. The company now holds as investment no less than \$711,325 of these notes, being 60 per cent. of their entire funds. This company have declared dividends of 35 per cent.; but as the holders are paid in their own notes, it is not of much consequence.

NATIONAL SAFETY INSURANCE.

62 WALNUT STREET, PHILADELPHIA, TWO DOORS BELOW THE PHILADELPHIA SAVINGS FUND.

In November, 1850, a writ of *quo warranto* was sued out in the Court of Common Pleas, requiring the parties to show cause, they being an unincorporated company, why they insured lives. They afterwards obtained a sort of supplement, February, 1851. The proximity of the persons to the Savings Fund enables them—as the office is kept open to a very late hour—to receive from strangers money in deposit. They have been lately establishing agencies throughout the States. No table of their rates is given in this work, and the only object in mentioning them is to attract due attention.

NEW ENGLAND MUTUAL LIFE INSURANCE COMPANY.

GUARANTEE CAPITAL, \$50,000.—28 STATE STREET, BOSTON.

Chartered, 1843.

WILLARD PHILLIPS, Pres't.

BENJAMIN F. STEVENS, Sec'y.

Net accumulation—exceeding \$395,000, and increasing—for benefit of members, present and future.

The whole safely and advantageously invested.

The business conducted exclusively for the benefit of the persons insured.

The greatest risk taken on a life, \$10,000.

Surplus distributed among the members every fifth year, from December 1, 1843; settled in cash, or by addition to policy.

Premium may be paid quarterly or semi-annually, when desired, and amounts not too small.

In a policy for the whole life, the insured, being under the age of fifty-seven, may pay annually, for five years, in cash, not over one-half, and interest annually on the other half of the premium: if over that age, three-fifths, at least, so to be paid, and interest on the remainder.

Forms of application, and pamphlets of the company, and its reports, to be had of its agents, or at the office of the company, or forwarded by mail, if written for post-paid.

NEW YORK LIFE INSURANCE AND TRUST COMPANY.

CAPITAL, \$1,000,000.—52 WALL STREET, NEW YORK.

Incorporated, 1830.

DAVID THOMPSON, Pres't.

PHILIP R. KEARNY, Sec'y.

This office is under the annual supervision of the Supreme Court.

The company insures lives; grants and purchases annuities; and makes any other contracts, involving the interest of money and the duration of life. It also receives money in trust: to accumulate the same at such rates of interest as may be obtained or agreed on, or to allow such interest thereon as may be agreed on, not exceeding in either case the legal rate. It accepts and executes all such trusts, of every description, as may be committed to them by any person or persons whatsoever; or may be transferred to them *by order of the court of chancery, or by a surrogate.*

NATIONAL LOAN FUND LIFE ASSURANCE SOCIETY. +

MIXED COMPANY.

CAPITAL, \$2,500,000.—SURPLUS, \$520,314 — \$3,020,314.

71 WALL STREET, NEW YORK.

Established A. D. 1837.

C. E. HABICHT, Chairman. J. LEANDER STARR, Gen'l Agent.

E. T. RICHARDSON, Gen'l Acc't.

J. G. HOLBROKE, Chief Agent Southern States, Philadelphia.

LEADING FEATURES.—A withdrawal table. Parties assuring under which participate in the profits—can at any time borrow one-half the premiums paid on a mere endorsement on the policy, without giving any note, and can discontinue such policy at pleasure, without being called on to repay such advance.

A table by which the assured can receive the amount of his policy during his lifetime, on attaining the age of 60 years, or his representatives before that time, in the event of his decease.

Permission to proceed in steamships, or first-class sailing-packets, between ports in Europe and any ports in North America, (north and east of Baltimore, including said port of Baltimore,) at all seasons of the year, free of extra premium.

Officers in the United States Navy allowed to proceed to any station (the coast of Africa excepted) on payment of an extra annual premium of 1 per cent. in addition to the common premium; but such additional premium to be paid from the commencement of policy.

Two-thirds the profits divided among the assured for the whole term of life, annually, after the first five years.

Thirty days allowed after each payment of common premium becoming due, (should even the life assured cease to have existed during the said days of grace) without forfeiture of policy; provided such payment be made *within* the time specified.

Agencies throughout all the healthy States of the Union—where prospectuses can be procured.

NEW YORK LIFE INSURANCE COMPANY. +

ACCUMULATED CAPITAL, \$360,000.—No. 106 BROADWAY.

MORRIS FRANKLIN, Pres't.

PLINY FREEMAN, Actuary.

The business is conducted on the mutual system purely, dividends being made annually on all policies for life, and become part of the accumulated capital, on which such interest is paid as the board of trustees may declare.

The usual rates of premiums are charged, and can be paid annually, semi-annually, or quarterly, or, when the policy is for the whole term of life, and the premium amounts to \$50, annual payments of sixty per cent. in cash, and forty per cent. in note may be made.

Individual risks are taken for any amount not exceeding \$10,000. Liberal travelling privileges are allowed, and extra risks taken at equitable rates.

The company has been in successful operation upwards of six years, during which it has issued more than 7000 policies, and, after paying large sums to widows, orphans, and creditors, has now an accumulated fund exceeding \$360,000. Six annual dividends have been made, viz. two of forty and one of fifty per cent., upon which six per cent. interest has been paid in cash.

NORTH CAROLINA MUTUAL LIFE INSURANCE COMPANY.

RALEIGH, NORTH CAROLINA.

Chartered, 1849.

CHARLES E. JOHNSON, Pres't.

JAMES F. JORDAN, Sec'y.

This company is yet new to life insurance. At page 9 of its prospectus is the usual fallacy of mutual offices : that, at 25 years of age sum insured \$5000, premium \$120, duration of life 34 years, profits \$11,250 ; which, added to the sum insured, produces the amount of \$16,350, payable at the death of the insured. Please observe that, by the Carlisle tables, at 25 years there are 5879 persons alive ; at 60 years of age, 3643 only alive. The deaths amount to 2236 persons of \$5000 each, equal to \$11,180,000 ; besides 34 years' office expenses. Who pays this ? By the mutual fallacy every person is calculated to live the full term, and to receive \$16,350 without deduction.

NORTH AMERICAN MUTUAL LIFE AND HEALTH INSURANCE COMPANY.

CAPITAL \$100,000.—OFFICE NO. 48 WALNUT STREET, OPPOSITE THE EXCHANGE, PHILADELPHIA.

Chartered by the State of Pennsylvania.

WM. C. LUDWIG, Pres't.

JOHN BINGHAM, Vice Pres't.

WM. F. DEAN, Secretary and Treasurer.

The company makes insurance on lives either upon the mutual or joint-stock principle ; and at rates as low as can be adopted to answer the purposes of a proper administration of its affairs.

A large reserved or sinking fund, from the premiums received, is specially held, and solely applied to meet the company's liabilities, on their contracts with the insured.

PENNSYLVANIA COMPANY FOR INSURANCES ON LIVES AND GRANTING ANNUITIES.

PROPRIETARY COMPANY.

CAPITAL, \$500,000.—66 WALNUT STREET, PHILADELPHIA.

Chartered, A. D. 1812.

HYMAN GRATZ, Pres't.

WILLIAM B. HILL, Actuary.

Since 1st January, 1845, this company divides the profits of the insurance business with the assured every five years. The first division was made on 1st January, 1850, and paid in cash, viz. twelve and a half per cent. of the amounts received for premium during the previous five years to the assured, and the same amount to the company.

This company, in addition to insuring lives and granting annuities, &c. dependent upon life contingencies, act as executor, guardian, or trustees, and also receive money on deposit at interest, which is payable to the depositors on demand, or upon short notice.

This company is the oldest in the United States, and has no agents, all the business being transacted at their office.

PENN MUTUAL LIFE INSURANCE COMPANY.

GUARANTEE CAPITAL, \$80,500.—NOTES, \$80,500.—DOCK STREET, PHILADELPHIA

Chartered, 1847.

DANIEL L. MILLER, Pres't.

JOHN W. HORNER, Sec'y.

By the charter of 1847, all persons insured, their heirs, executors, and assigns, are members; by a supplement of 1851, this clause is repealed for *future* insurers.

By section 14th of their charter, after paying all *losses and expenses* for the year preceeding, each member is entitled to be credited with his proportion of the surplus; and by the 15th section, these amounts are made *absolutely* payable at the death of the insured. These clauses require a *profit and loss account*. By the SUPPLEMENT OF MARCH, 1851, which is only binding on future insurers, (not having power to interfere with contracts already made,) a statement annually of the affairs of the company is to be made, which is to be binding on all; cash premiums only entitled to share surplus; certificates to be issued for surplus—but no certificate shall be redeemed or paid off until the assets of the company amount to *four hundred thousand dollars*. The company have granted three dividends, amounting to \$93,000, whilst their *real* investments, on 31st December, 1850, only amounted to \$80,255 ²³/₁₀₀, as by published statement, January, 1851. These dividends are payable at death to the insurers previous to March 1851; but to parties insuring subsequently and under the *supplement*, they are not payable until the assets amount to \$100,000. This company, in its first prospectus, (page 6,) declared a *paid* capital “not only unnecessary but hurtful;” since which they have paid for the use of those unnegotiable notes, which they term a “*guarantee capital*” no less a sum than six thousand two hundred and twenty-five dollars. The future insurer may well ask, if the affairs of the Penn Mutual are so prosperous as to give \$93,000 of dividends, payable at death, where is the necessity to pay \$4025 per annum for guarantee notes; and if the business of the company is conducted in good faith, where was the necessity for a supplement which places all *new* insurers in a position to pay the *old* insurers all the dividends which were granted without a shadow of pretence from the real state of the business of the company? The country agents of this company are in the habit of making assertions relative to the dividends not founded in fact, and, it is to be hoped, not authorized by the Penn Mutual. (See p. 13, 14, 15.)

TRENTON MUTUAL LIFE INSURANCE COMPANY.

TRENTON, NEW JERSEY.

Chartered, 1847.

JOSEPH C. POTTS, Pres't.

ELI MORRIS, Sec'y.

This company had an agency in New York; but the comptroller's certificate, after inquiring into the state of the securities of the company, was withdrawn, and they were obliged to leave that city. Their principal attraction *was* a low rate of premium. They are now seldom heard of among life offices.

+ PHILADELPHIA LIFE INSURANCE COMPANY.

MIXED COMPANY.

CAPITAL \$100,000—WITH AN INCREASING CONTINGENT FUND.

Established A. D. 1848.—N. W. corner Third and Walnut Streets.

Has powers to make all kinds of insurance on lives; receive and execute trusts; make endowments; and to grant and purchase annuities.

The rates of insurance are as low as they believe to be safe, and the profits, when properly ascertained by calculation, are divided *in cash* with the insured.

Premiums may be paid either annually, half-yearly, or quarterly.

Loans advanced on policies of the value of \$100 or upwards, and policies purchased on liberal terms.

Parties insured for the whole term of life can go to any part of the British Provinces of North America, or within the settled limits of the United States, (except the Southern States during July, August, September, and October), or can cross the Atlantic in first-class vessels during the summer months, *free of extra charge*.

Every facility given on moderate terms to persons going beyond the prescribed limits of their policies.

PROTESTANT EPISCOPAL CORPORATION

For the Benefit of Widows and Children of Clergymen, in the Commonwealth of Pennsylvania.

PHILADELPHIA.

Chartered, 1769.

HON. HORACE BINNEY, Chairman. GEORGE M. WHARTON, Actuary.

The fund is *exclusively* for the widows and children of deceased clergymen who have been annual contributors.

After all the charges of the year against the corporation have been paid or provided for, so much of any surplus, interest, or profit as the corporation shall then see fit, shall be added to the funds, and the remainder, if any, shall be applied as the corporation shall think just, to increase the annuities, endowments, and other payments made by the corporation. *5th Chap. By-Laws.*

One family received for thirteen years an annuity of four hundred dollars, instead of eighty, the amount due by contract. They are now paying the same proportion of excess beyond the amount contracted for, to other persons.

SOUTHERN MUTUAL LIFE INSURANCE COMPANY.

CAMP STREET, NEW ORLEANS.

JOS. BALDWIN, Pres't.

HARMAN DOANE, Sec'y.

In first year.

SOUTHERN MUTUAL LIFE INSURANCE COMPANY.

ATHENS, GEORGIA.

Chartered, 1850.

ASHBURY HULL, Pres't.

ALBION CHASE, Sec'y.

Rates about the same as the Albion's mutual rates.

STATE MUTUAL LIFE INSURANCE.

WORCESTER, MASSACHUSETTS.

Chartered, 1844.

JOHN DAVIS, Pres't.

CLARENDON HARRIS, Sec'y.

A low cash premium, to which a deposit of six per cent. cash is to be added, and a premium note varying from 15 to 30 per cent., to guard against contingencies.

UNITED STATES LIFE INSURANCE COMPANY. +

MIXED.

CAPITAL, \$100,000.—PAID, \$100,000.—27 WALL STREET, NEW YORK.

Chartered, 1850.

FREDERICK SHELDON, Pres't.

J. EADIE, Sec'y.

JOHN A. STEWART, Actuary.

By a law passed by the Legislature of the State of New York, in the year 1851, to come into force on the first of August of the same year, every New York company is obliged to deposit with the comptroller \$100,000 in stocks, at or above par, &c. &c. &c., as security "that all debts and liabilities of every kind, that are due or may become due upon any contract or agreement made with any citizen of the State of New York, are paid." The whole capital, therefore, of the United States company is not only mortgaged to the State, but, in its infancy, whilst the expenses are proportionately too large for the business transacted, (last year they exceeded 50 per cent. of the amount of receipts, which should be paid by capital,) the premiums have to be used for that purpose. There is therefore no security to persons residing out of the State of New York for any contract they may enter into with the lately chartered companies of that State.

UNION MUTUAL LIFE INSURANCE COMPANY. +

STATE STREET, BOSTON.

Chartered, 1848.

ELISHA B. PRATT, Pres't.

HENRY CROCKER, Sec'y.

This company is chartered by the State of Maine, though its prospectus is dated Boston. By its return in the office of the comptroller of the State of New York, on the 1st of January, 1851, the liabilities were \$4,191,614, whilst the actual assets, invested and available, in stocks, bonds, and cash, amounted to the paltry sum of \$26,252,156. The Union declared a dividend of eighty per cent. before they had been six months in existence. Their short term rates of premiums are, by the experience of the united offices, (see p. 42,) in the higher ages, 30 per cent. below prime cost. They have some names of distinguished persons in their direction, who never could have examined the scheme or inquired into the accounts. The certificate of this company must have been withdrawn by the comptroller of the State of New York but for the new insurance law of 1851.

→ UNITED STATES LIFE INSURANCE, ANNUITY, AND TRUST COMPANY.

CAPITAL, \$250,000.—THIRD AND CHESTNUT, PHILADELPHIA.

Chartered, 1850.

STEPHEN R. CRAWFORD, Pres't. CHARLES G. IMLAY, Sec'y.

The capital of this company is \$250,000, of which \$103,880 has been paid in and invested, (exclusive of premiums,) the remainder well secured: ample indemnification is therefore afforded to all persons contracting with the company, more especially as the capital is absolute (not guarantee capital,) and cannot be withdrawn by the contributors.

The capital of the company being invested for the benefit of the insured, they enjoy the extraordinary privilege of this security without any material expense to themselves, perfect mutuality with perfect security being fully accomplished by this arrangement. Lives in this company are therefore insured at the lowest cost price.

The whole of the surplus or profits made by this department will be divided among the insured, and endorsed upon the policy, in proportion to the amount of premiums paid by them, and will remain at their credit, an accumulating fund, payable at death, together with the sum insured, or the present value of said profits so divided will be purchased in cash on demand.

Premium payments can be made with reference to the convenience of parties opening policies with the company.

Policies will be issued for the benefit of married women and children, free from the claims of the representatives of her husband or any of his creditors.

☞ Policies may be assigned without the knowledge of the company.

☞ No policy shall be vitiated through error merely, unless there existed at the time a fraudulent intention.

☞ The original amount of policies will be reduced at any time, to suit the pleasure of insured parties.

☞ Policies of two or more years' standing will be purchased upon surrender.

☞ Policies with the profits, forfeited by non-payment of premiums, may be renewed at any time by the payment of arrears, with interest; provided the health of the party at the time is unimpaired.

The liberality of the travelling license is peculiar to this company, permission being granted to cross the Atlantic, at any season of the year, in first-class steamers or sailing packets, free of extra charge.

The object aimed at by this institution is STABILITY and PERPETUITY. The rates of premium have been carefully prepared with reference to fluctuations. The cash system of payments has also been adopted. Unpaid premium notes constitute no parts of the assets of this company. The first object of the plan presented is to make certain provision to meet the first motive to insure, and which consideration should be paramount to all others, viz. the prompt payment of losses as they occur; AFTER WHICH, to make such additions of profits to the policy as the progressive gains of the company will justify.

The plan of operations adopted and practised by this company is quite as valuable to the insured as it is popular with the public, and fully merits the liberal patronage which has been extended to it since the date of its organization.

ANNUAL PREMIUMS

For Assuring the Sum of \$100 for the whole Term of a Single Life, with Participation in Profits.

Age.	Albion.	American Mutual.	American Life.	British Commercial.	Charter Oak.	Connecticut Mutual.	Equitable Life and Health.	Eagle.
15	\$1 72	\$1 17	\$1 56	\$1 84	\$1 56	\$1 44	\$1 57	\$1 92
16	1 75	1 21	1 62	1 89	1 62	1 54	1 61	1 95
17	1 79	1 24	1 65	1 94	1 65	1 57	1 65	1 97
18	1 83	1 27	1 69	1 98	1 69	1 61	1 69	2 01
19	1 88	1 30	1 73	2 03	1 73	1 64	1 73	2 04
20	1 92	1 33	1 77	2 08	1 77	1 68	1 78	2 08
21	1 97	1 37	1 82	2 12	1 82	1 78	1 83	2 12
22	2 02	1 41	1 88	2 16	1 88	1 84	1 88	2 16
23	2 07	1 45	1 93	2 20	1 93	1 89	1 93	2 20
24	2 12	1 49	1 98	2 24	1 98	1 94	1 99	2 24
25	2 17	1 53	2 04	2 29	2 04	2 04	2 05	2 28
26	2 23	1 59	2 11	2 33	2 11	2 11	2 11	2 33
27	2 29	1 63	2 17	2 38	2 17	2 17	2 17	2 38
28	2 35	1 68	2 24	2 43	2 24	2 24	2 23	2 43
29	2 42	1 74	2 31	2 49	2 31	2 31	2 30	2 48
30	2 48	1 78	2 36	2 54	2 36	2 36	2 37	2 54
31	2 55	1 83	2 43	2 60	2 43	2 43	2 43	2 59
32	2 63	1 88	2 50	2 63	2 50	2 50	2 50	2 65
33	2 71	1 93	2 57	2 72	2 57	2 57	2 57	2 72
34	2 79	1 98	2 64	2 78	2 64	2 64	2 65	2 79
35	2 88	2 06	2 75	2 85	2 75	2 75	2 73	2 85
36	2 97	2 11	2 81	2 92	2 81	2 81	2 82	2 93
37	3 07	2 18	2 90	2 99	2 90	2 90	2 91	3 01
38	3 17	2 29	3 05	3 07	3 05	3 05	3 01	3 09
39	3 28	2 34	3 11	3 15	3 11	3 11	3 11	3 18
40	3 39	2 40	3 20	3 23	3 20	3 20	3 21	3 27
41	3 52	2 50	3 31	3 32	3 31	3 31	3 31	3 37
42	3 64	2 55	3 40	3 41	3 40	3 40	3 41	3 47
43	3 78	2 68	3 51	3 52	3 51	3 51	3 52	3 59
44	3 92	2 73	3 63	3 60	3 63	3 63	3 63	3 70
45	4 08	2 80	3 73	3 70	3 73	3 73	3 75	3 83
46	4 24	2 95	3 87	3 85	3 87	4 06	3 88	3 96
47	4 42	3 01	4 01	4 00	4 01	4 21	4 02	4 09
48	4 59	3 13	4 17	4 17	4 17	4 38	4 17	4 24
49	4 79	3 37	4 49	4 35	4 49	4 71	4 35	4 40
50	4 99	3 45	4 60	4 55	4 60	4 83	4 54	4 57
51	5 20	3 57	4 75	4 78	4 75	5 13	4 76	4 74
52	5 43	3 68	4 90	5 01	4 90	5 29	4 99	4 93
53	5 68	3 93	5 24	5 23	5 24	5 66	5 24	5 12
54	5 93	4 12	5 49	5 40	5 49	5 93	5 50	5 33
55		4 34	5 78	5 59	5 78	6 42	5 78	5 54
56		4 54	6 05	5 78	6 05	6 77	6 09	5 78
57		4 71	6 27	5 99	6 27	7 02	6 42	6 03
58		4 88	6 50	6 21	6 50	7 28	6 77	6 29
59		5 07	6 75	6 45	6 75	7 56	7 12	6 57
60		5 25	7 00	6 69	7 00	7 84	7 47	6 87

ANNUAL PREMIUMS

For Assuring the Sum of \$100 for the whole Term of a Single Life, with Participation in Profits.

Age.	Equitable.	Girard.	Hartford Life and Health.	Hope.	Kentucky Mutual.	Keystone.	Manhattan.	Mutual Life, New York.
15	\$	\$1 56	\$1 56	\$1 56	\$1 23	\$1 56	\$1 46	\$1 56
16	1 50	1 62	1 62	1 62	1 26	1 62	1 51	1 62
17	1 53	1 65	1 65	1 65	1 29	1 65	1 54	1 65
18	1 56	1 69	1 69	1 69	1 32	1 69	1 58	1 69
19	1 59	1 73	1 73	1 73	1 35	1 73	1 63	1 73
20	1 60	1 77	1 77	1 77	1 38	1 77	1 67	1 77
21	1 63	1 82	1 82	1 82	1 42	1 82	1 72	1 82
22	1 66	1 88	1 83	1 83	1 46	1 88	1 78	1 88
23	1 69	1 93	1 93	1 93	1 51	1 93	1 84	1 93
24	1 72	1 98	1 98	1 98	1 57	1 98	1 89	1 98
25	1 76	2 04	2 04	2 04	1 62	2 04	1 94	2 04
26	1 85	2 11	2 11	2 11	1 68	2 11	2 01	2 11
27	1 89	2 17	2 17	2 17	1 73	2 17	2 09	2 17
28	1 94	2 24	2 24	2 24	1 79	2 24	2 16	2 24
29	1 98	2 31	2 31	2 31	1 85	2 31	2 22	2 31
30	2 04	2 36	2 36	2 36	1 90	2 36	2 27	2 36
31	2 09	2 43	2 43	2 43	1 96	2 43	2 36	2 43
32	2 15	2 50	2 50	2 50	2 01	2 50	2 43	2 50
33	2 20	2 57	2 57	2 57	2 07	2 57	2 50	2 57
34	2 27	2 64	2 64	2 64	2 13	2 64	2 57	2 64
35	2 33	2 75	2 75	2 75	2 19	2 75	2 70	2 75
36	2 40	2 81	2 81	2 81	2 27	2 81	2 76	2 81
37	2 47	2 90	2 90	2 90	2 35	2 90	2 85	2 90
38	2 54	3 05	3 05	3 05	2 44	3 05	2 99	3 05
39	2 63	3 11	3 11	3 11	2 53	3 11	3 08	3 11
40	2 70	3 20	3 20	3 20	2 63	3 20	3 17	3 20
41	2 81	3 31	3 31	3 31	2 73	3 31	3 31	3 31
42	2 92	3 40	3 40	3 40	2 83	3 40	3 40	3 40
43	3 01	3 51	3 51	3 51	2 93	3 51	3 51	3 51
44	3 12	3 63	3 63	3 63	3 03	3 63	3 63	3 63
45	3 23	3 73	3 73	3 73	3 14	3 73	3 73	3 73
46	3 36	3 87	4 06	3 87	3 26	3 87	3 87	3 87
47	3 49	4 01	4 21	4 01	3 40	4 01	4 01	4 01
48	3 62	4 17	4 38	4 17	3 54	4 17	4 17	4 17
49	3 77	4 49	4 71	4 49	3 69	4 49	4 49	4 35
50	3 94	4 60	4 83	4 60	3 85	4 60	4 60	4 60
51	4 13	4 75	5 13	4 75	4 03	4 75	4 75	4 75
52	4 32	4 90	5 29	4 90	4 22	4 90	4 90	4 90
53	4 51	5 24	5 66	5 24	4 43	5 24	5 24	5 24
54	4 71	5 49	5 93	5 49	4 64	5 49	5 49	5 49
55	4 91	5 78	6 42	5 78	4 96	5 78	5 78	5 78
56	5 12	6 05	6 77	6 05	5 20	6 05	6 05	6 05
57	5 33	6 27	7 02	6 27	5 60	6 27	6 27	6 27
58	5 54	6 50	7 28	6 50	6 00	6 50	6 50	6 50
59	5 78	6 75	7 56	6 75	6 40	6 75	6 75	6 75
60	6 03	7 00	7 84	7 00	6 75	7 00	7 00	7 00

ANNUAL PREMIUMS

For Assuring the Sum of \$100 for the whole Term of a Single Life, with Participation in Profits.

AGE.	Mutual Benefit.	National Loan Fund.	New York Life.	North American.	New York Life and Trust.	New England Mutual.	North Carolina.	Protestant Episcopal of Penna.
15	\$1 56	\$1 65	\$1 56	\$1 56	\$1 57	\$1 53	\$1 56	\$
16	1 62	1 69	1 62	1 62	1 61	1 56	1 62	
17	1 65	1 73	1 65	1 65	1 65	1 61	1 65	
18	1 69	1 78	1 69	1 69	1 69	1 65	1 69	
19	1 73	1 82	1 73	1 73	1 74	1 70	1 73	
20	1 77	1 87	1 77	1 77	1 78	1 74	1 77	1 86
21	1 82	1 92	1 82	1 82	1 83	1 78	1 82	1 91
22	1 88	1 97	1 88	1 88	1 88	1 83	1 88	1 96
23	1 93	2 03	1 93	1 93	1 93	1 88	1 93	2 01
24	1 98	2 08	1 98	1 98	1 99	1 94	1 98	2 06
25	2 04	2 14	2 04	2 04	2 05	1 98	2 04	2 14
26	2 11	2 20	2 11	2 11	2 10	2 03	2 11	2 19
27	2 17	2 27	2 17	2 17	2 18	2 09	2 17	2 25
28	2 24	2 33	2 24	2 24	2 24	2 15	2 24	2 31
29	2 31	2 40	2 31	2 31	2 31	2 21	2 31	2 38
30	2 36	2 47	2 36	2 36	2 37	2 28	2 36	2 44
31	2 43	2 53	2 43	2 43	2 43	2 34	2 43	2 50
32	2 50	2 60	2 50	2 50	2 50	2 42	2 50	2 56
33	2 57	2 68	2 57	2 57	2 57	2 49	2 57	2 64
34	2 64	2 75	2 64	2 64	2 65	2 57	2 64	2 71
35	2 73	2 83	2 73	2 73	2 73	2 66	2 73	2 79
36	2 81	2 91	2 81	2 81	2 82	2 74	2 81	2 88
37	2 90	2 99	2 90	2 90	2 91	2 84	2 90	2 96
38	3 05	3 08	3 05	3 05	3 00	2 93	3 05	3 05
39	3 11	3 17	3 11	3 11	3 10	3 04	3 11	3 15
40	3 20	3 27	3 20	3 20	3 21	3 16	3 20	3 24
41	3 31	3 37	3 31	3 31	3 31	3 27	3 31	3 35
42	3 40	3 48	3 40	3 40	3 41	3 39	3 40	3 45
43	3 51	3 60	3 51	3 51	3 51	3 52	3 51	3 55
44	3 63	3 72	3 63	3 63	3 63	3 65	3 63	3 66
45	3 73	3 85	3 73	3 73	3 75	3 81	3 73	3 78
46	3 87	4 00	3 87	3 87	3 87	3 96	3 87	3 90
47	4 01	4 15	4 01	4 01	4 02	4 13	4 01	4 03
48	4 17	4 31	4 17	4 17	4 17	4 31	4 17	4 18
49	4 49	4 49	4 49	4 49	4 35	4 50	4 49	4 35
50	4 60	4 68	4 60	4 60	4 54	4 71	4 60	4 53
51	4 75	4 88	4 75	4 75	4 76	4 92	4 75	4 73
52	4 90	5 10	4 90	4 90	4 99	5 15	4 90	4 95
53	5 24	5 34	5 24	5 24	5 24	5 39	5 24	5 18
54	5 49	5 60	5 49	5 49	5 50	5 66	5 49	5 41
55	5 78	5 86	5 78	5 78	5 77	5 94	5 78	5 69
56	6 05	6 14	6 05	6 05	6 09	6 24	6 05	5 96
57		6 43	6 27	6 27	6 25	6 57	6 27	6 28
58		6 75	6 50	6 50	6 50	6 90	6 50	6 59
59		7 08	6 75	6 75	6 77	7 28	6 75	6 91
60		7 42	7 00	7 00	7 03	7 65	7 00	7 24

ANNUAL PREMIUMS

For Assuring the Sum of \$100 for the whole Term of a Single Life, with Participation in Profits.

AGE.	Pennsylvania.	Penn.	Philadelphia Life.	State Mutual.	United States, Philadelphia.	United States, New York.	Union Mutual.
15	\$1 49	\$1 56	\$	\$1 10	\$1 56	\$1 53	\$1 54
16	1 54	1 62	.	1 13	1 62	1 59	1 60
17	1 59	1 65		1 16	1 65	1 62	1 64
18	1 64	1 69		1 19	1 69	1 66	1 68
19	1 69	1 73		1 22	1 73	1 70	1 72
20	1 75	1 77	1 50	1 24	1 77	1 74	1 76
21	1 81	1 82	1 55	1 28	1 82	1 79	1 80
22	1 87	1 88	1 60	1 32	1 88	1 84	1 88
23	1 93	1 93	1 65	1 36	1 93	1 89	1 92
24	1 98	1 98	1 71	1 39	1 98	1 94	1 98
25	2 04	2 04	1 77	1 44	2 04	2 00	2 04
26	2 11	2 11	1 84	1 49	2 11	2 07	2 10
27	2 17	2 17	1 90	1 54	2 17	2 13	2 16
28	2 24	2 24	1 97	1 59	2 24	2 20	2 24
29	2 31	2 31	2 02	1 63	2 31	2 27	2 30
30	2 36	2 36	2 06	1 68	2 36	2 32	2 36
31	2 43	2 43	2 10	1 72	2 43	2 38	2 42
32	2 50	2 50	2 18	1 77	2 50	2 45	2 50
33	2 57	2 57	2 25	1 82	2 57	2 52	2 56
34	2 64	2 64	2 31	1 88	2 64	2 59	2 64
35	2 75	2 75	2 36	1 94	2 75	2 70	2 74
36	2 81	2 81	2 45	2 00	2 81	2 76	2 80
37	2 90	2 90	2 52	2 07	2 90	2 84	2 90
38	3 02	3 05	2 57	2 13	3 05	2 99	3 04
39	3 11	3 11	2 65	2 21	3 11	3 05	3 10
40	3 20	3 20	2 73	2 28	3 20	3 14	3 20
41	3 31	3 31	2 83	2 38	3 31	3 25	3 32
42	3 40	3 40	2 92	2 43	3 40	3 33	3 40
43	3 51	3 51	2 99	2 50	3 51	3 44	3 52
44	3 63	3 63	3 12	2 58	3 63	3 56	3 64
45	3 73	3 73	3 21	2 67	3 73	3 66	3 76
46	3 87	3 87	3 35	2 76	3 87	3 79	3 88
47	4 01	4 01	3 45	2 87	4 01	3 93	4 00
48	4 17	4 17	3 60	2 98	4 17	4 08	4 20
49	4 49	4 49	3 72	3 11	4 49	4 27	4 50
50	4 60	4 60	3 96	3 25	4 60	4 51	4 60
51	4 75	4 75	4 17	3 41	4 75	4 66	4 76
52	4 90	4 90	4 39	3 58	4 90	4 80	4 92
53	5 24	5 24	4 67	3 76	5 24	5 14	5 26
54	5 46	5 49	4 85	3 96	5 49	5 39	5 50
55	5 68	5 78	5 19	4 17	5 78	5 67	5 78
56	5 90	6 05	5 47	4 40	6 05	5 93	6 06
57	6 13	6 27	5 76	4 64	6 27	6 15	6 28
58	6 37	6 50	6 20	4 89	6 50	6 37	6 50
59	6 62	6 75	6 36	5 16	6 75	6 62	6 76
60	6 88	7 00	6 74	5 42	7 00	6 86	7 00

RATES OF PREMIUM

For the whole Term of a Single Life, without Participation in Profits.

AGE.	Etna.	Albion.	American Life.	American Life. Total Absence.	Baltimore Life.	British Commercial.	Charter Oak.	Hartford Life.	National Loan Fund.	New York Life and Trust.
15	\$1 20	\$1 52	\$1 30	\$1 00	\$1 46	\$1 50	\$1 20	\$1 04	\$1 48	\$1 46
16	1 23	1 55	1 35	1 04	1 49	1 54	1 23	1 08	1 52	1 49
17	1 26	1 59	1 39	1 06	1 53	1 58	1 26	1 10	1 56	1 53
18	1 29	1 63	1 41	1 10	1 57	1 62	1 29	1 13	1 60	1 57
19	1 33	1 66	1 44	1 13	1 61	1 66	1 33	1 16	1 64	1 61
20	1 36	1 70	1 47	1 16	1 65	1 70	1 36	1 18	1 68	1 65
21	1 40	1 74	1 52	1 19	1 69	1 73	1 40	1 22	1 73	1 69
22	1 44	1 78	1 57	1 23	1 74	1 76	1 44	1 26	1 78	1 74
23	1 48	1 83	1 60	1 27	1 79	1 80	1 48	1 29	1 83	1 79
24	1 53	1 88	1 65	1 29	1 84	1 83	1 53	1 32	1 88	1 84
25	1 58	1 92	1 70	1 33	1 90	1 87	1 58	1 36	1 93	1 90
26	1 63	1 97	1 76	1 38	1 95	1 90	1 63	1 41	1 98	1 95
27	1 68	2 03	1 81	1 42	2 02	1 95	1 68	1 45	2 04	2 02
28	1 74	2 08	1 86	1 47	2 08	1 98	1 74	1 50	2 10	2 08
29	1 79	2 14	1 93	1 51	2 14	2 03	1 79	1 54	2 16	2 14
30	1 84	2 19	1 96	1 54	2 19	2 10	1 84	1 58	2 22	2 19
31	1 89	2 26	2 03	1 58	2 25	2 17	1 89	1 62	2 28	2 25
32	1 94	2 33	2 08	1 63	2 31	2 23	1 94	1 67	2 35	2 31
33	2 00	2 40	2 14	1 68	2 38	2 30	2 00	1 72	2 41	2 38
34	2 06	2 47	2 20	1 72	2 45	2 35	2 06	1 76	2 48	2 45
35	2 13	2 55	2 29	1 79	2 53	2 43	2 13	1 84	2 55	2 53
36	2 20	2 63	2 34	1 83	2 61	2 51	2 20	1 88	2 62	2 61
37	2 27	2 71	2 42	1 89	2 69	2 60	2 23	1 94	2 70	2 69
38	2 35	2 80	2 54	1 99	2 78	2 67	2 35	2 04	2 77	2 78
39	2 40	2 90	2 59	2 03	2 86	2 75	2 43	2 08	2 85	2 87
40	2 51	3 00	2 67	2 08	2 96	2 85	2 54	2 14	2 94	2 97
41	2 60	3 11	2 76	2 16	3 06	2 95	2 60	2 21	3 03	3 06
42	2 68	3 22	2 83	2 21	3 16	3 05	2 68	2 27	3 13	3 16
43	2 76	3 34	2 92	2 29	3 25	3 14	2 76	2 34	3 24	3 25
44	2 85	3 47	3 03	2 36	3 36	3 24	2 85	2 42	3 35	3 36
45	2 95	3 61	3 10	2 43	3 47	3 36	2 95	2 49	3 47	3 47
46	3 05	3 75	3 23	2 56	3 59	3 53	3 05	2 71	3 60	3 59
47	3 17	3 90	3 34	2 68	3 72	3 70	3 17	2 81	3 73	3 72
48	3 30	4 06	3 48	2 78	3 86	3 91	3 30	2 93	3 88	3 86
49	3 45	4 23	3 75	3 00	4 02	4 12	3 45	3 15	4 04	4 02
50	3 61	4 41	3 84	3 07	4 21	4 30	3 61	3 23	4 21	4 21
51	3 79	4 60	3 96		4 41	4 48	3 79	3 43	4 40	4 41
52	3 99	4 81	4 09		4 60	4 67	3 99	3 53	4 60	4 62
53	4 19	5 02	4 37		4 85	4 83	4 19	3 78	4 81	4 85
54	4 42	5 25	4 58		5 08	5 00	4 42	3 96	5 04	5 10
55	4 66		4 82		5 35	5 25	4 66	4 29	5 28	5 36
56	4 92		5 05		5 60	5 51	4 92	4 52	5 53	5 64
57	5 20		5 23		5 90	5 70	5 20		5 79	5 95
58	5 50		5 42		6 20	5 91	5 50		6 07	6 27
59	5 80		5 63		6 36	6 14	5 80		6 37	6 59
60	6 09		5 84		6 68	6 37	6 09		6 68	6 75

ANNUAL PREMIUMS

For Assuring \$100 on a Single Life, for One Year.

Age.	Etwa.	Albion.	American Mutual.	American Life.	British Commercial.	Baltimore Life.	Charter Oak.	Connecticut Mutual.	Eagle Life and Health.
15	\$ 69	\$ 88	\$ 58	\$ 65	\$ 80	\$ 77	\$ 69	\$ 77	\$ 78
16	74	89	53	70	84	79	74	84	83
17	75	90	65	72	88	81	75	86	87
18	76	90	67	74	92	83	76	89	88
19	77	91	68	75	96	85	77	90	89
20	78	92	69	76	97	87	78	91	90
21	79	93	70	77	98	89	79	92	91
22	80	94	71	79	1 02	92	80	94	92
23	82	96	73	81	1 03	93	82	97	95
24	83	97	74	83	1 08	95	83	99	98
25	84	98	75	84	1 09	97	84	1 00	1 01
26	85	1 00	80	89	1 13	1 00	85	1 07	1 09
27	86	1 01	84	94	1 18	1 02	86	1 12	1 14
28	92	1 03	90	1 00	1 23	1 05	92	1 20	1 21
29	98	1 05	96	1 07	1 28	1 07	98	1 28	1 27
30	1 03	1 06	98	1 09	1 29	1 10	1 03	1 31	1 30
31	1 07	1 08	99	1 10	1 34	1 12	1 07	1 32	1 31
32	1 09	1 10	1 00	1 11	1 40	1 15	1 09	1 33	1 32
33	1 11	1 13	1 01	1 12	1 41	1 19	1 11	1 34	1 33
34	1 13	1 15	1 02	1 13	1 43	1 22	1 13	1 35	1 34
35	1 14	1 18	1 03	1 14	1 48	1 25	1 14	1 36	1 36
36	1 16	1 20	1 04	1 16	1 50	1 29	1 16	1 39	1 39
37	1 20	1 23	1 07	1 20	1 56	1 32	1 20	1 43	1 42
38	1 23	1 25	1 11	1 24	1 58	1 36	1 23	1 48	1 48
39	1 31	1 28	1 18	1 31	1 60	1 40	1 31	1 57	1 56
40	1 44	1 31	1 27	1 41	1 62	1 44	1 44	1 69	1 66
41	1 53	1 34	1 34	1 49	1 64	1 49	1 53	1 78	1 77
42	1 55	1 38	1 39	1 55	1 66	1 52	1 55	1 85	1 84
43	1 56	1 43	1 42	1 58	1 73	1 55	1 56	1 89	1 85
44	1 59	1 48	1 43	1 59	1 80	1 60	1 59	1 90	1 86
45	1 61	1 55	1 44	1 60	1 83	1 65	1 61	1 91	1 87
46	1 63	1 63	1 45	1 61	1 86	1 69	1 63	1 92	1 88
47	1 66	1 71	1 46	1 62	1 94	1 74	1 66	1 93	1 89
48	1 68	1 80	1 47	1 63	2 02	1 78	1 68	1 94	1 92
49	1 71	1 90	1 48	1 64	2 10	1 83	1 71	1 95	1 94
50	1 75	2 01	1 49	1 65	2 24	1 87	1 75	1 96	1 97
51	1 78	2 14	1 50	1 66	2 38	1 92	1 78	1 97	1 98
52	1 82	2 27	1 52	1 69	2 53	1 97	1 82	2 02	2 00
53	1 87	2 41	1 58	1 75	2 70	2 02	1 87	2 10	2 08
54	1 91	2 57	1 64	1 82	2 75	2 07	1 91	2 18	2 18
55	1 98		1 74	1 94	2 88	2 31	1 98	2 32	2 31
56	2 10		1 85	2 06		2 55	2 10	2 47	2 45
57	2 31		2 03	2 25		2 75	2 31	2 70	2 70
58	2 68		2 36	2 62		2 97	2 68	3 14	3 11
59	3 13		2 76	3 06		3 21	3 13	3 67	3 64
60	3 70		3 27	3 63		3 46	3 70	4 35	4 31

ANNUAL PREMIUMS

For Assuring \$100 on a Single Life, for One Year.

Age.	Faerle, British.	Equitable.	Glarnd.	Hartford Life and Health.	Hope.	Kentucky Mutual.	Keystone.	Manhattan.	Mutual Life, New York.
15	\$1 24	\$	\$ 77	\$ 64	\$ 77	\$ 84	\$ 77	\$ 72	\$ 77
16	1 24	77	84	72	84	86	84	78	84
17	1 25	78	86	73	86	88	86	80	86
18	1 25	79	89	74	89	89	89	83	89
19	1 26	80	90	75	90	90	90	85	90
20	1 27	81	91	76	91	91	91	86	91
21	1 28	82	92	77	92	92	92	87	92
22	1 29	83	94	78	94	93	94	89	94
23	1 30	85	97	80	97	95	97	92	97
24	1 31	87	99	81	99	98	99	94	99
25	1 32	89	1 00	82	1 00	1 03	1 00	95	1 00
26	1 33	91	1 07	83	1 07	1 09	1 07	1 02	1 07
27	1 35	93	1 12	84	1 12	1 16	1 12	1 08	1 12
28	1 36	95	1 20	89	1 20	1 22	1 20	1 16	1 20
29	1 37	97	1 28	97	1 28	1 26	1 28	1 23	1 28
30	1 39	99	1 31	1 01	1 31	1 28	1 31	1 26	1 31
31	1 40	1 02	1 32	1 04	1 32	1 30	1 32	1 28	1 32
32	1 42	1 05	1 33	1 06	1 33	1 31	1 33	1 29	1 33
33	1 44	1 08	1 34	1 08	1 34	1 33	1 34	1 30	1 34
34	1 45	1 11	1 35	1 11	1 35	1 35	1 35	1 31	1 35
35	1 47	1 14	1 36	1 12	1 36	1 38	1 36	1 32	1 36
36	1 50	1 17	1 39	1 13	1 39	1 44	1 39	1 35	1 39
37	1 52	1 20	1 43	1 17	1 43	1 50	1 43	1 40	1 43
38	1 54	1 23	1 48	1 20	1 48	1 60	1 48	1 45	1 48
39	1 56	1 26	1 57	1 28	1 57	1 68	1 57	1 56	1 57
40	1 58	1 29	1 69	1 41	1 69	1 75	1 69	1 66	1 69
41	1 61	1 34	1 78	1 50	1 78	1 83	1 78	1 78	1 78
42	1 64	1 39	1 85	1 52	1 85	1 85	1 85	1 85	1 85
43	1 67	1 44	1 89	1 53	1 89	1 87	1 89	1 89	1 89
44	1 72	1 49	1 90	1 56	1 90	1 90	1 90	1 90	1 90
45	1 77	1 54	1 91	1 59	1 91	1 91	1 91	1 91	1 91
46	1 84	1 59	1 92	1 61	1 92	1 92	1 92	1 92	1 92
47	1 91	1 64	1 93	1 62	1 93	1 93	1 93	1 93	1 93
48	1 98	1 70	1 94	1 65	1 94	1 94	1 94	1 94	1 94
49	2 07	1 78	1 95	1 69	1 95	1 95	1 95	1 95	1 95
50	2 16	1 86	1 96	1 72	1 96	1 96	1 96	1 96	1 96
51	2 25	1 94	1 97	1 75	1 97	2 00	1 97	1 97	1 97
52	2 36	2 00	2 02	1 79	2 02	2 12	2 02	2 02	2 02
53	2 47	2 08	2 10	1 84	2 10	2 25	2 10	2 10	2 10
54	2 60	2 15	2 18	1 89	2 18	2 45	2 18	2 18	2 18
55	2 74	2 25	2 32	1 95	2 32	2 75	2 32	2 32	2 32
56	2 89	2 38	2 47	2 06	2 47	3 10	2 47	2 47	2 47
57	3 05	2 58	2 70		2 70	3 50	2 70	2 70	2 70
58	3 22	3 00	3 14		3 14	3 90	3 14	3 14	3 14
59	3 41	3 48	3 67		3 67	4 25	3 67	3 67	3 67
60	3 62		4 35		4 35	4 60	4 35	4 35	4 35

ANNUAL PREMIUMS

For Assuring \$100 on a Single Life, for One Year

AGE.	Mutual Benefit.	National Loan Fund.	New York Life.	North American.	N. England Mutual.	North Carolina. For White.	North Carolina. Slave Pr'ms.	Pennsylv- ania.	Penn Mutual.
15	\$ 77	\$ 78	\$ 77	\$ 77	\$ 72	\$ 77	\$ 1 18	\$ 72	\$ 77
16	84	80	84	84	78	84	1 21	76	84
17	86	82	86	86	82	86	1 21	80	86
18	89	84	89	89	85	89	1 22	84	89
19	90	85	90	90	88	90	1 23	88	90
20	91	87	91	91	91	91	1 24	90	91
21	92	88	92	92	93	92	1 25	92	92
22	94	91	94	94	95	94	1 26	94	94
23	97	93	97	97	99	97	1 29	97	97
24	99	96	99	99	1 01	99	1 30	99	99
25	1 00	99	1 00	1 00	1 03	1 00	1 32	1 00	1 00
26	1 07	1 02	1 07	1 07	1 05	1 07	1 35	1 07	1 07
27	1 12	1 05	1 12	1 12	1 07	1 12	1 36	1 12	1 12
28	1 20	1 10	1 20	1 20	1 10	1 20	1 38	1 20	1 20
29	1 28	1 16	1 28	1 28	1 16	1 28	1 40	1 28	1 28
30	1 31	1 21	1 31	1 31	1 17	1 31	1 41	1 31	1 31
31	1 32	1 26	1 32	1 32	1 19	1 32	1 43	1 32	1 32
32	1 33	1 31	1 33	1 33	1 20	1 33	1 48	1 33	1 33
33	1 34	1 35	1 34	1 34	1 21	1 34	1 52	1 34	1 34
34	1 35	1 41	1 35	1 35	1 22	1 35	1 56	1 35	1 35
35	1 36	1 46	1 36	1 36	1 25	1 36	1 60	1 36	1 36
36	1 39	1 51	1 39	1 39	1 26	1 39	1 62	1 39	1 39
37	1 43	1 55	1 43	1 43	1 30	1 43	1 66	1 43	1 43
38	1 48	1 58	1 48	1 48	1 32	1 48	1 69	1 48	1 48
39	1 57	1 59	1 57	1 57	1 35	1 57	1 73	1 57	1 57
40	1 69	1 61	1 69	1 69	1 44	1 69	1 77	1 69	1 69
41	1 78	1 63	1 78	1 78	1 51	1 78	1 80	1 78	1 78
42	1 85	1 65	1 85	1 85	1 57	1 85	1 86	1 85	1 85
43	1 89	1 67	1 89	1 89	1 61	1 89	1 95	1 89	1 89
44	1 90	1 70	1 90	1 90	1 63	1 90	2 00	1 90	1 90
45	1 91	1 72	1 91	1 91	1 67	1 91	2 10	1 91	1 91
46	1 92	1 76	1 92	1 92	1 71	1 92	2 22	1 92	1 92
47	1 93	1 80	1 93	1 93	1 78	1 93	2 33	1 93	1 93
48	1 94	1 85	1 94	1 94	1 85	1 94	2 44	1 94	1 94
49	1 95	1 89	1 95	1 95	1 94	1 95	2 57	1 95	1 95
50	1 96	1 95	1 96	1 96	2 08	1 96	2 70	1 96	1 96
51	1 97	2 00	1 97	1 97	2 23	1 97	2 89	1 97	1 97
52	2 02	2 08	2 02	2 02	2 32	2 02	3 08	2 02	2 02
53	2 10	2 17	2 10	2 10	2 45	2 10	3 26	2 10	2 10
54	2 18	2 30	2 18	2 18	2 55	2 18	2 48	2 18	2 18
55	2 32	2 54	2 32	2 32	2 71	2 32	3 75	2 32	2 32
56	2 47	2 78	2 47	2 47	2 91	2 47	4 05	2 47	2 47
57		3 01	2 70	2 70	3 13	2 70	4 37	2 70	2 70
58		3 25	3 14	3 14	3 42	3 14	4 50	3 14	3 14
59		3 48	3 67	3 67	3 76	3 67	4 80	3 67	3 67
60		3 74	4 35	4 35	4 17	4 35	5 10	4 14	4 35

ANNUAL PREMIUMS

For Assuring \$100 on a Single Life, for One Year.

Age.	Philadelphia Life.	State Mutual.	United States, Philadelphia.	United States, New York.	Southern Mutual.	Southern Mutual Benefit.	Union.
15	\$	\$ 66	\$ 77	\$ 77	\$ 83	\$ 77	\$ 56
16		67	84	80	86	84	60
17		67	86	83	89	86	64
18		68	89	85	92	89	68
19		68	90	87	95	90	70
20	81	68	91	89	98	91	72
21	82	69	92	91	1 01	92	74
22	83	72	94	94	1 04	94	76
23	85	75	97	96	1 07	97	78
24	87	79	99	99	1 10	99	80
25	89	83	1 00	1 00	1 13	1 00	82
26	91	87	1 07	1 04	1 17	1 07	84
27	93	91	1 12	1 07	1 21	1 12	86
28	95	95	1 20	1 14	1 25	1 20	90
29	97	97	1 28	1 18	1 29	1 28	94
30	99	98	1 31	1 21	1 33	1 31	98
31	1 02	99	1 32	1 23	1 37	1 32	1 00
32	1 05	1 00	1 33	1 26	1 41	1 33	1 02
33	1 08	1 02	1 34	1 31	1 45	1 34	1 04
34	1 11	1 06	1 35	1 34	1 49	1 35	1 06
35	1 14	1 11	1 36	1 36	1 53	1 36	1 08
36	1 17	1 16	1 39	1 39	1 57	1 39	1 10
37	1 20	1 22	1 43	1 42	1 61	1 43	1 12
38	1 23	1 27	1 48	1 47	1 65	1 48	1 14
39	1 26	1 32	1 57	1 52	1 70	1 57	1 20
40	1 29	1 37	1 69	1 55	1 75	1 69	1 28
41	1 34	1 39	1 78	1 59	1 80	1 78	1 34
42	1 39	1 40	1 85	1 64	1 85	1 85	1 38
43	1 44	1 39	1 89	1 68	1 90	1 89	1 42
44	1 49	1 38	1 90	1 72	1 95	1 90	1 44
45	1 54	1 37	1 91	1 77	2 00	1 91	1 46
46	1 59	1 37	1 92	1 81	2 06	1 92	1 48
47	1 64	1 38	1 93	1 86	2 12	1 93	1 50
48	1 70	1 41	1 94	1 90	2 19	1 94	1 52
49	1 78	1 46	1 95	1 95	2 26	1 95	1 54
50	1 86	1 53	1 96	1 96	2 34	1 96	1 56
51	1 94	1 63	1 97	1 97	2 43	1 97	1 58
52	2 00	1 75	2 02	2 02	2 53	2 02	1 60
53	2 08	1 92	2 10	2 10	2 65	2 10	1 62
54	2 15	2 13	2 18	2 18	2 78	2 18	1 64
55	2 25	2 38	2 32	2 32	2 92	2 32	1 72
56	2 38	2 64	2 47	2 58	3 07	2 47	1 84
57	2 58	2 90	2 70	2 78	3 24	2 70	2 00
58	3 00	3 17	3 14	3 14	3 43	3 14	2 36
59	3 48	3 42	3 67	3 43	3 66	3 67	2 76
60	4 02	3 63	4 35	3 70	3 95	4 35	3 26

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